
The Monitor

Official Newsletter of the Brantford Amateur Radio Club

October 2002

Edited by Terri Ellison VA3TDE and Ken Dobson VA3DDB

Whitson Wows 'Em from Canada to California



US Astronaut Peggy Whitson, KC5ZTD, at work in the ISS Destiny Lab. Whitson recently was named the first science officer for the ISS. [NASA Photo]

NEWINGTON, CT, Oct 4, 2002--Continuing a successful string of Amateur Radio on the International Space Station school contacts, US astronaut Peggy Whitson, KC5ZTD, during the past week answered questions from youngsters in northern Canada to southern California. At the controls of NA1SS on September 27, Whitson spoke with youngsters at Joamie Luniarvik , a kindergarten through grade 5 school in Iqaluit, the capital of Canada's newest territory, Nunavut. She followed up October 2 by answering questions posed by youngsters at St Mark's Lutheran School in Hacienda Heights, California.

Joamie Luniarvik (Public School)

The Joamie youngsters spoke to Whitson via a teleconferencing circuit that included ARISS

veteran Earth station operator Gerald Klatzko, ZS6BTD, in South Africa. Although a South African station on an adjacent channel unwittingly interfered with the 2-meter downlink frequency, the youngsters were able to hear most of Whitson's answers.

Among other things, the 12 participating children in Iqaluit wanted to know about working in weightlessness, meteor showers and what kept the ISS in space.

Whitson said working in a zero-gravity environment makes doing a lot of things easier than on Earth, but if you need to apply some force, she said, "it's difficult to find the appropriate foothold to hold yourself into place."

Another youngster asked about meteor showers. "From here, we can actually see some of the meteors as they enter Earth's atmosphere," Whitson said, "and we hope to not run into any of them at all."

Whitson explained that velocity is what keeps the ISS in space but about every three months the crew needs to do an orbital boost. "The ISS travels at 17,500 MPH," Whitson said. "That's what keeps us in orbit."

Whitson also told the students that she's ready to head back to Earth next month, even though she's enjoyed her scientific experiments. "So much of my time up here is very very exciting," she said. Responding to another question, Whitson expounded on the importance of space exploration. "The human species will always be exploring new frontiers," she said, "and I think it's important that we go to space for lots of different reasons, some on a more practical level--for the science and technology that we learn--but mostly I think it is most important to go into space to continue exploration."

So that Whitson would be able to connect the question with a particular pupil, photos with name tags of the Joamie students were sent to the ISS ahead of their ARISS contact. During the past year, youngsters at the school have had a space theme and explored various aspects of space and the solar system.

Sharing the experience with the Iqaluit students were youngsters at a school in Ottawa, Ontario. The two schools were connected via a two-way videoconferencing link.

"The event proved to be a huge success both in Iqaluit and Ottawa," said ARISS mentor Steve McFarlane, VE3TBD. A total of 800 people--including news media representatives and various dignitaries--were in attendance at both schools. "The school and students were terrific," said McFarlane, who initially approached the school at random because he wanted more isolated communities involved in the ARISS program.

"They took the challenge and exceeded the best of expectations," he said. "The ISS contact in this case was not only a radio contact but a complete program of plays, presentations and communications with another school."

St Mark's Lutheran School

Whitson told students at St Mark's Lutheran School in Hacienda Heights, California, on October 2 that the most challenging thing she had to do in preparation for her space flight was to learn how to speak Russian. The ISS crew consists of American and Russian members.

"It's not one of my skills, and so learning Russian was very difficult for me," Whitson said. "It made learning about guidance and navigation seem easy." Her biggest thrill was being able to go on a space walk and enjoying the experience of "flying like a bird." Being in the spacesuit for a space walk "is just like being in our own space capsule," she said.

Being able to do her scientific experiments aboard the ISS was the most worthwhile of her activities during her tour of duty as part of the Expedition 5 crew. Developing better superconductor and zeolite crystals are some of the more beneficial pieces of research, she said. The lack of gravity on the ISS is one of the advantages that contribute to scientific research.

In response to a question about what she missed on Earth in addition to her family and friends, Whitson replied "food!" She told the students that she's "tired of eating out of cans" and having to rehydrate all her food.

Two dozen St Mark's students took part in the ARISS QSO. Principal Barbara Clark said the students' questions evolved from a schoolwide competition to select the best questions from each grade level. Whitson was impressed. "I think they did an excellent job," she said. "These were some of the best questions I've had and actually got more to the point of asking what it really feels like to be here."

Whitson and Clark attended college together, and Whitson visited St Mark's School about five years ago. Located approximately 80 miles east of Los Angeles, St Mark's has an enrollment of some 800 students in kindergarten through eighth grade.

The St Mark's contact was handled via ARISS Earth station veteran Tony Hutchison, VK5ZAI, in Australia. Audio for both the Joamie and St Mark's QSOs was handled via a WorldCom teleconferencing circuit.

ARISS is an international project, with US participation by ARRL, AMSAT and NASA

Beware of the 'Vultures'!

from Jerry Heien, N9AVY on September 16, 2002

No one really likes to think about it, but someday we'll all be Silent Keys. Those who are left behind will no doubt be "stuck" with a lot of equipment and parts which they may not know how to dispose of; more precisely, how to get some of that hard-earned cash back that we invested in all that "junk"

The simplest way to protect the "heirs" from being confused and possibly ripped off is to make a complete inventory of your shack and workshop. Finding the current market value of used equipment might be difficult, but a listing of purchase prices is a good start. It would be nice if local clubs had a committee, which could help by figuring out current market prices so the heirs would be able to get a decent return on our investment.

Recently, I was present at an estate sale where a fellow ham offered the widow a measly \$200 for equipment that was easily worth twice that and maybe more. I paid half that amount for just one older radio! Unfortunately, there are many of these "Vultures" out there who take advantage of these situations and will take it all out to hamfests or put it on eBay. These "vultures" are really slick businessmen who use ham radio as a vehicle to make money and are seldom heard on the air unless they hear of equipment for sale. When they get to a sale they tell you it's old, outdated and they probably wouldn't be able to sell it for very much. When you hear that line, you can put your ear next to the guy's head and hear the cash register ringing!

If you go to hamfests be sure to find out who the "vultures" are and never buy anything from them. Maybe they'll go away. The local ham grapevine should be able to identify these characters for you.

Protect yourself and your survivors by having a complete inventory and access to honest hams who will assist your survivors in disposing of your equipment.

Hurricane Center uses IRLP for Lili Net

from Danny Musten KD4RAA on October 10, 2002

Website:

<http://www.eham.net/articles/www.kd4raa.net>

Just seven days after Isidore made landfall as a strong tropical storm, Category-4 Hurricane Lili threatened the Louisiana coast on October 3, 2002. Lili was the first hurricane to make landfall in the U.S. since 1999. Forecasters were concerned that Lili could be a potential disaster for much of coastal Louisiana with 145 mile-per-hour winds and up to a 20-foot storm surge predicted.

Robert Broderick, WE4B and John McHugh, KU4GY in Miami had corresponded earlier in the week with Danny Musten KD4RAA, in Raleigh to use the IRLP East Coast Reflector 921 to coordinate an IRLP-Skywarn / Hurricane net. Using the Reflector would allow all of the participating repeaters and nodes in the affected area to be linked and be heard simultaneously. "Emergency response was one of the primary reasons that we established the East Coast

Reflector," said Danny. "We were excited that this new technology that links repeaters nation-wide and beyond could be activated for this purpose".

Amateurs operating the W4EHW station at the National Hurricane Center in Miami began receiving reports as Hurricane Lili approached the Louisiana coast. Hams operating through IRLP nodes in Lafayette, Baton Rouge, Abbeville and Greenwell Springs linked to the East Coast Reflector. Bob Broderick, WE4B in Miami acted as net control for the IRLP-Skywarn net and liaison to the Hurricane Center. Officials even reported in with their HT's from the Baton Rouge Red Cross as well as from the Louisiana Office of Emergency Preparedness.

"With this storm, we established another milestone in W4EHW's history," said, John McHugh, KU4GY, coordinator for Amateur Radio at the NHC. "Using the Palmetto Radio Club repeater that was connected to similar repeaters in Louisiana via IRLP (Internet Radio Linking Project), we were able to collect weather reports from stations in the affected area that do not have HF radios."

StormStudy weather specialist John Van Pelt, K4JVP, at the invitation of the Hurricane Intercept Research Team, traveled from Raleigh to Morgan City, LA, with hopes of reporting back first-hand via the IRLP. The Lafayette repeater was out of range to his coastal location, but John was able to give measured reports via patch through Raleigh IRLP node 427, which was connected to Reflector 921. WE4B stated that the "patch reports from John, K4JVP - the hurricane specialist in Morgan City, were very well received by the NHC in Miami".

During the Net, an occasional stray node from Australia or the UK would link to the Reflector to start a QSO and would be immediately escorted off. That duty fell to the hands of Jim Price, WW4M and Jack Thorpe, WA0ERX in Raleigh, Nate Duehr, WY0X in Denver, CO and Paul Cassel VE3SY in Petersburg Ontario Canada, who monitored the Raleigh Reflector for 24 hours to block any node that might interfere with Net communications. Jim Price, WW4M commented that, "Because IRLP is linked worldwide, stations from unaffected areas as far away as Ontario and Colorado were able to respond to this emergency as net control operators, which freed up stations in Louisiana for other matters. If the Reflector is ever needed 24 hours per day for several days to respond to bigger disasters, we could even bring in fresh control ops from Australia to work the late shift when it's the middle of the night in the U.S."

Net traffic on Reflector 921 was also monitored locally in Raleigh on the K4JDR-KD4RAA group repeaters as well as in Wilmington. Joe Landers KE4EUE reported from the Wakefield Virginia node/repeater that officials from the National Weather Service and Virginia State Radio Officers were monitoring and on standby to offer health and welfare if needed. Other IRLP nodes from adjacent states were listening in on the Hurricane Net, many of which were ready to offer any needed assistance.

As a bonus, folks could listen via the internet to keep up with the traffic on Reflector 921. There were streaming audio feeds made available to the internet from the W4ATC Student Amateur Radio Society at NC State University and Live365 from VE3SY. With Lili receiving national attention, many were anxious about this storm. Fortunately it was downgraded to a Cat-2, but K4JVP reported that "over a half million people in Louisiana were without power. Tree damage was massive. It would have been devastating if the storm had come in as expected on Wednesday night."

Robert Hobbs, N5ULA, EC for East Baton Rouge Parish, offered his thanks for all the help during the Net. "It showed a lot of the guys here locally that it (IRLP) can and will work. Maybe now we can expand our node coverage in more of the coastal cities that will be a big help next time. I really want to get nodes up in Slidell and Lake Charles so that the Amateur Stations at the NWS offices in both cities can have access. We have our work cut out for us, but with a winning track record now I feel it will be a little easier."

In North Carolina, the KD4RAA-K4JDR repeater group plans to soon add the K4OBX Outer Banks and Morehead nodes to the existing N4JDW nodes in Wilmington to aid in storm reporting and emergency preparedness along the coast. Other states are also considering IRLP nodes for reporting to the National Weather Service and Emergency Management. Information or requests to use the East Coast Reflector 921 can be emailed to: ref921@kd4raa.net

IRLP is the creation of Canadian Ham, David Cameron VE7LTD.

Resources:

<http://www.fiu.edu/orgs/w4ehw/>

W4EHW at the National Hurricane Center

<http://www.irlp.net/>

Internet Radio Linking Project

<http://www.kd4raa.net/>

IRLP Reflector 921

<http://www.stormstudy.com/>

K4JVP's weather education project

<http://w4atc.ncsu.edu/>

W4ATC -NC State Student club - skywarn streaming audio

Club IRLP Node On-line

Finally after a few delays the Club's IRLP node is up and running. Node # 1590 is temporarily located at Ken Dobson's (VA3DDB) residence connected to his Rogers High Speed Internet. Soon Node 1590 will be permanently relocated at Gary Stonehouse's residence and continue serving Brantford and County.

The repeater committee and Ken Dobson worked together preparing the equipment for this IRLP node. Dave and Gary added a necessary PL tone of 131.8hz on the output of the UHF repeater and adjusted the levels appropriately. The defunct Packet node link radio to Hamilton was removed from the repeater site and reprogrammed to act as the IRLP link radio. The PL tone was added to the receive to meet the requirements of the IRLP network. A PL tone is not required by a user to use the UHF repeater or IRLP. It has been added as a method of removing the repeater tail and ID from the IRLP audio.

Ken provided the computer hardware and interface cables for the node for free. Red Hat Linux 6.2 was installed and configured for use. Audio files and scripts were created and imported into the IRLP node computer. Audio levels were set and the node tested.

Ken is preparing to demonstrate IRLP at an upcoming Tuesday night meeting. Further the Web site will have some pictures of the node and provide operating instructions.

The IRLP network is growing rapidly with new nodes appearing weekly. The Brantford node should generate some interest and traffic with the Brantford and County radio operators.

Additional information is available at:

<http://www.irlp.net>

Official IRLP Web Site

Stupid Amateur Tricks 101

I hate to tell off on myself but they say that confession is good for the soul. I have been ham for only about 2 years now but I have already pulled some really stupid tricks. Following are just a few I'm willing to share...

Cross band tricks I have an Icom 2800 rig in my truck. As you well know this radio is capable of monitoring 2 bands at the same time. On several occasions I have answered a call on the wrong band and after repeating my call several times with no answer I actually stopped the truck to check my antenna.

The old sit on the mike trick Once during a Skywarn net I rushed out to my truck to turn on the radio after getting a signal from my pager. The LED meter showed full strength on the Skywarn repeater frequency but there was no audio! What could be wrong? I stared dumbly at the radio and turned the volume knob up and down (at this point I think my face probably resembled that of a deer just seconds before a truck runs him down). Then inspiration hit as I noticed the red transmit light glowing on the face of my rig. I frantically searched for the mike. Yep, right where my brain was...

The old lost power trick After I passed my General exam I purchased a new HF rig. One night I rushed into the shack eager to get on the air. Anticipation was high as I booted the computer to get my logging program up and running. The sunspot numbers were through the roof and I knew that I was bound to make many new contacts. I confidently reached up and stabbed the power button on my rig. Nothing happened! WHAT! What could be wrong? It worked great last night! My heart sank, my rig is dead! I imagined the long wait as the radio was shipped to the far away repair shop and the hours of precious radio time I would lose. But wait, it could be a fuse! I checked the in line fuses. They were fine. Maybe an internal fuse? I carefully unhooked all my station gear, removed all the covers from the radio, and peered inside the radio. As I was doing this a nagging thought occurred, did I check the power supply? Well? A quick glance to my right revealed the power supply dumbly sitting on the desk waiting for some idiot to turn its power switch on.

Epilogue: Not listed but guilty all the same... How I learned about working split. Which end of a solder iron gets real hot. Mobile antennas don't like tree limbs (antenna base Ht. = 5' Tree Limb = 5') How I learned how much feed line to leave loose so rotor can turn antennas full 360 degrees.

While this list is representative of my indiscretions it certainly is not exhaustive. But it has only been 2 years! I'll check back after 10.

KD5NZH

The Easy Way to Learn Morse Code:

from Tom C. Lish II, N6AJR on September 21, 2002

I have found a down load that will let you learn the code easily, at a good rate of speed and with minimum effort. It's from Ray Goff in the UK and it's a super program. You might want to look at this one even if you already know the code because it can take you to 50 wpm if you'd like to try.

It starts off by sending you 2 characters, M and K and you copy these two down on paper in 5 minute sessions until you hit 90 % correct, then you add the next letter. You continue to do this until you can recognize all 46 characters and Pro signs and numbers. Every time you get proficient at the letters that you are doing, simply add a new one.

This is called the Koch Method and was actually thought up by a Psychologist type fellow in the 1920's, but only now is the computer technology available to do it easily.

You can also add noise, reduce signal strength, and other things to make it more like on the air, but you don't have to use this option if you don't want to. The slowest rate is 15 WPM and the fastest is 50 wpm but you can do 1/2 or quarter speed and slow it even more (around 3.5 wpm is the absolute slowest.) If you start at 20 WPM and then listen to it at 15, you swear you can take a nap waiting for the next character. Really, the program is that easy to use.

The only problem I had with the entire program is that it wants to unzip itself to my Temporary file on the hard drive and then I had trouble finding it. I recommend that when it ask you to unzip it to C:\Temp, you choose a sub directory of your choice. You then go there and run the SETUP icon and it puts it on your drive in a separate sub-directory, which is

easy to find (I think its G4FON directory). Copy the shortcut for the program to your desktop and have fun and learn the code. It works with Win 95 and 98 and several others, about all you really need is Windows and a sound card. Contact Ray at his site and I believe he may have a Linux version, and possibly a DOS version cooking.

This is a super easy way to learn the code at 15 or 20 wpm from the start, and you can also use it to improve your code ability in the future. All you VE types, this is a freebie to copy to CD-Rom and hand out to your new tech's who want to learn the code.

My hat is off to MR. Ray Goff, G4FON, who took several ideas and made this program that really works. All Ray asks for is that you drop a line to him if you do any type of improvement on the program so he can share it with everyone else.

Check this out; I think it may solve your no-code blues problem. This is so easy it should be illegal!

73 Tom N6AJR

Check out the G4FON website at:
<http://www.g4fon.co.uk/>

Coming Events

26th Annual YORK REGION HAMFEST
York Region Amateur Radio Club
Saturday, November 2, 2002
Markham ON

ESSENTIAL CLUB INFORMATION

President: Bill Cunliffe, VA3WRC

Vice-President: Bob Moore, VE3AVU

Secretary: Ken Dobson, VA3DDB

Treasurer: Paul Tourangeau, VE3IUA

MEETINGS: Every Tuesday at 7:30 PM.
Business meeting, second Tuesday of the month

LOCATION: Canadian Red Cross Society, 25 William St. 1st Floor, Brantford.

MAILING: Brantford Amateur Radio Club, P.O. Box 25036, Brantford, ON, N3T 6K5

REPEATERS: VE3TCR 147.150 MHz+600 KHz & 443.025+5 MHz

INTERNET WEB SITE:

www.bfree.on.ca/comdir/alh/bramaradio/ve3ba.htm

e-mail: ve3ba@bfree.on.ca