DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.

MAY 2011

W3OK CORRAL

Club Meeting May 5th 7:30 PM
At the Nancy Run Fire Company

“ Bits & Pieces “
Bob / NE2C and His Bag of tricks

MEETING PROGRAM

Barry / KU3X
Operating QRP (Live demo)

MAY MEETING THEME

LOUDEST TIE

FROM THE PRESIDENT'S SHACK

ARRL / W1AW Trip

The club trip to ARRL headquarters scheduled for April 11 had to be canceled due to insufficient number of members signing up. We needed to get at least 24 for the coach rental, and could have taken up to 47. When that number failed to sign up, the club canceled the trip and returned the funds to those that had signed up.

Since a number of us had already held that day aside for the trip, Al W3CE and I decided we would make the trip in our personal vehicles. Between the two of us, we could take a total of 14 people. We then contacted the first 12 members that were signed-up for the trip and offered spots in our cars.

On Monday, at 6:30AM we met at the Bethlehem Diner for breakfast. At about quarter after seven we got under way for Newington, CT. The three and a half hour trip up went quickly (no “are we there yet?” asked). There were various stories and discussions of ham radio taking up most of the travel time.

We arrived at the ARRL headquarters shortly before 11AM, and after a much needed “pit stop”, began a tour of the operations. First stop was the awards and logging department where Jeff could inquire about about a pending award certificate. Next stop was the ARES section. The ARRL has prepared some large “go” kits with complete stations (both HF and VHF kits) that can be sent to emergency sites. This eliminates the need for each volunteer to provide their equipment (with the attendant multiple setups and tear-downs). We continued on to the administrative offices, publication and advertising offices, and education department. There is quite a bit of effort that goes into generating QST each month and into efforts to capture the interest of potential hams.

A visit to the QSL bureau revealed a large volunteer effort at sorting the multitude of cards received and forwarding those onto their respective partner bureaus. In between the various departments, we passed through halls lined with display cases filled with historical artifacts dating to the beginning of radio. The headquarters is a much a museum as it is a working office.

After visiting the VE department, the headquarters tour finished at the testing lab. The lab consisted of a room sized Faraday cage with a wall of equipment racks. Most of the radio equipment reviewed in QST is evaluated here. We had a quite lengthy question and answer session with the head engineer. It was interesting to see the array of equipment involved as well as the extensive calibration and testing which is accomplished. Adjacent to the Faraday room is a lab area where projects can be built prior to being published.

After the headquarters tour, most of us went to grab lunch, while a few stayed on to go over and operate at W1AW. W1AW, which is housed in a separate building has multiple towers and antennas and three glass-walled operating studios. Each studio, had two operating positions. Each operating position was equipped with the latest high-end radio with access to a linear amplifier and, of course, the antenna system. If you've wondered what it's like to operate one of the newest radio into a linear running legal limit and a great antenna, this is the place to try it.

My first CQ on 20M as W1AW (you must use their call and not yours), went unanswered. My second call brought a response. As I wrapped up the QSO and called QRZ I was buried in a pile-up. If you have never worked a significant (more than 10 stations calling you) pile-up, it is an awesome experience. It can be every bit as difficult to operate as breaking a pile-up. All you can make out is the occasional suffix or prefix letters. A second call to the letters you made out (sending through people that didn't notice you were responding) and you can start the QSO. Wrap up the QSO and before you can say 73 the calling pile-up begins (sometimes calling you during the QSO … all mouth and no ears or brains). You're lucky if you can make out the closing 73 from your prior QSO. Not much need for a QRZ, unless to discipline the eager callers. Toss into this process, the gray-matter challenged hams that are amused by throwing a continuous carrier (with the occasional mindless modulation) on the frequency and you get the picture. You gain a real appreciation for the notch filter. That being said, I had a great time. I do prefer that end of a pile-up.

We wrapped up around 4PM (W1AW needs to use the antennas for bulletins and code training transmissions), and headed for home. A stop in Milford for dinner and the last hour in a driving rain and we were back where we started. Everyone mentioned that they had a great time. If you haven't made the trip to ARRL HQ and get the chance, take the opportunity. I am looking forward to a return trip and an opportunity to try out some different pile-up techniques.
I hope to see you all at the May club meeting.

73 - **N3SQD / George**

MAY CONTESTING AT THE OK CORRAL

May 7th & 8th – ARI International DX Contest
May 14th & 15th – Volta WW RTTY Contest
May 21st & 22nd – Baltic Contest
May 28th & 29th – CQ WW WPX DX Contest – CW

APRIL MEETING PROGRAM

The theme “Bits and Pieces” does really tell the real story on the presentation that **Bob / NE2C** gave. Hints to and ideas about how to accomplish many thing and still be “down and dirty”. No need to run to the major stores for your projects, just go to “Tractor Supply” for the parts and build you own (What ever you have in mind). Using trimmer line for antenna supports, spud gun parts, with help from “Lowe's” and even cheap aluminum wire which when wound together formed a substantial metal cable. Bob presented other items that were cheap to purchase and handy to have around for antenna work. All is need is to lay out your idea, then go shop around for reasonable parts and build it.

MINUTES FROM THE APRIL 7th MEETING

The general membership meeting of the Delaware Lehigh Amateur Radio Club inc. was held at the Nancy Run Fire company in Bethlehem Township on April 7th 2011.
Call to Order: The meeting convened at 1930 hours, President **George / N3SQD** presiding**.**
Pledge of Allegiance: Led by **George / N3SQD**
Members & Guests in Attendance: 51 with 1 guest

REPORTS:

Approval of the minutes: 1st **Gary / N2AUO**, 2nd **Dave / N3EYT – Motion Carried**
Approval of the Treasurer's Report: 1st **Dave / KA3IWC**, 2nd **Ed / AA3OU**. -- **Motion Carried.**
Repeater/ Web-site: no issues with repeater. Problems logging on the website, Brad to be informed.
VE Session: No session this month, next session May 6th at the 911 Center.
Club Station: Dave / K3GMT reported **John / N3INJ** and **Bob / NE2C** to build a beverage antenna for the milkhouse
Membership: Dave / K3GMT - 174 pd members - 1nd **Keith / KB3UMX**, 2nd **Terry / KB3VFB - Motion Carried**

EVENTS:

Hanover Township 5K Walk: April 16 - 15 volunteers needed starts 9:00 am - Contact **Charlie / N3WXO**
Lehigh Valley MS Walk: May 1st Sunday - 8:30 am, **Howard / WO3P** looking for volunteers
U.S.S. New Jersey trip: May 2nd – Contact **Al / W3CE**
Palmerton Hospital 5K: May 7th, Contact **Charlie / N3WXO** or **Brian / W3SG**
Field Day - June 25-26 - Louise Moore Park looking for operators for over night operation. **Tom / KB3IUE** Sign-up Sheet at the May and June Meetings. Practice on tower erection prior to Field Day to be announced.

OLD BUSINESS:

WIAW Bus Trip: Bus canceled, **Al / W3CE** and G**eorge / N3SQD** driving own vehicles.
Nancy Run Donation: To be made per last month's motion.
Classes for Technician and General : **Bob / KE3AW** Reported classes half way completed, almost ready for testing.

NEW BUSINESS:

Ray / W3TDF received the Norm Zoltak Award for higest scoring club member in the 2010 PA QSO Party
Ben / KB3CTX spoke on House Bill HR607 which is to authorize the selling of frequencies iaround the 70 centimeter band. Members were urged to write letters against the bill and sending them to the ARRL department handing this.
Pete / NL7XM suggested a chilli Contest to be held at the club picnic in August

May Program: Al / W3CE: APRS (Automatic Packet Reporting System), Live Demo
May Theme: Most loudest Tie.
Adjournment: Meeting adjourned at 8:20 by **George / N3SQD.** 1st **Carl / AA3IX**, 2nd **Gary / N2AUO**

Respectfully submitted by
Doreen / KB3PDL, Secretary

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MAY 2011 QUICK CHECK CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	**2**	**3**	**4 DLARC RACES/ARES Net (N3SQD)**	**5 DLARC MEETING**	**6 V. E. SESSION**	**7**
8	**9**	**10**	**11 DLARC RACES/ARES Net (KR3U)**	**12**	**13**	**14**
15	**16**	**17 NewsLetter Articles Deadline**	**18 DLARC RACES/ARES Net (K3GMT)**	**19**	**20**	**21**
22	**23**	**24**	**25 DLARC RACES/ARES Net (WO3P)**	**26**	**26**	**28**
29	**30 MEMORIAL DAY**					

MONTHLY BRAIN TEASER

"A special prize awaits the first Club Member to submit the correct answer to this month's Brainteaser to Pete / NL7XM at nl7xm@arrl.net . The winner must be present at the next Meeting to receive it, or it goes unrewarded. Officers, Board members, and Brain Teaser Authors are not eligible to win."

de **NL7XM**

APRIL BRAINTEASER ANSWER
On a Map

The winner is **Vic / N2OFF**

MAY BRAINTEASER

Two legs I have, and this will confound: only at rest do they touch the ground.
What am I?

2011 MS WALK

The MS walk will be held Sunday May 1 2011 at Coca-cola park, Directions are:
Take U.S. 22 W to Exit for Airport Road South. Merge Right off exit ramp onto Airport Road South. Make a Right on American Parkway (at light, with intersection). Make a Left into Coca-Cola Park complex.

Registration starts at 9 A.M.
Walk starts at 10 A.M.
(Rain or Shine)
Our members should show up at 8:30 am to get into place,
Thank you, **Howard / WO3P**

THE APRIL MEETING THEME PRIZE WINNER

The April meeting theme was the " The Most Outrageous Hat" while competition was hot and heavy, **Ken / N3IYX** was the big winner. Competition from **George / N3SQD, (**who also made **Laurie** / **KB3SIK** blush) made it a race ,but Ken's "Pa Hatfield Chapeau" proved to be the top hat.

VE TEST SESSION

There will be a test session this month on May 6th at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact **George / N3SQD** at george@bioserv.com or **Al / W3CE** at w3ce@arrl.net.

WANTED: OLD CALLBOOKS

Pete / NL7XM is paying cash for OLD Callbooks. Contact him directly at: nl7xm@arrl.net

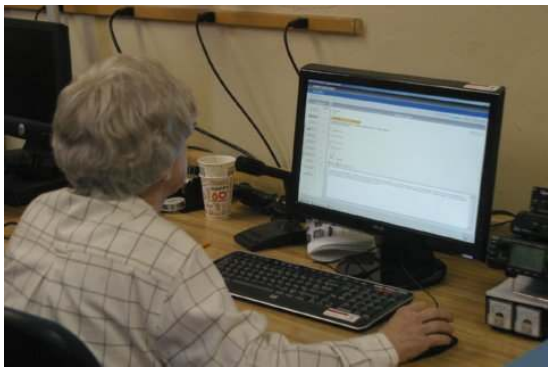
NEWS FROM THE MILK HOUSE

Attendance at the Milk House continues to hold up even during the rotten March weather with 122 visitors.
Band conditions continue to improve and the Milk House is logging many contacts in the Middle East, Africa and Asia.

Here is a small sample of the DX contacts made from the Milk House in March.

Phone:	CW:
JY5HX Jordan	A45XR Oman
9L2OD Kuwait	VK6HD Australia
A41OW Oman	JH1GNU Japan
7X4AM Algeria	6W2SC Senegal
HZ1BL Saudi Arabia	V521NAM Namibia (21st annv. of independence)
TF3CW Iceland	4A4A Revillagigedo Island (Dxpedition, worked on 3 bands)
ZL3IO New Zealand (10 meters)	5N7M Nigeria
3V8CC Tunisia (10 meters)	5X1XA Uganda
6V7D Senegal (10 meters)	ZLBYZ New Zealand
VU2PAI India	OA4SS Peru
JA7NVF Japan	4X20HC (Holyland 20th annv. contest)
UA0ADX Asiatic Russia (Siberia)	RW0LT Asiatic Russia (Vladivostok)

Carolyn / KB3UMY, is studying for her General license. She is using the software provided with her AARL study guide. The Milk House house has five computer all connected to high speed internet

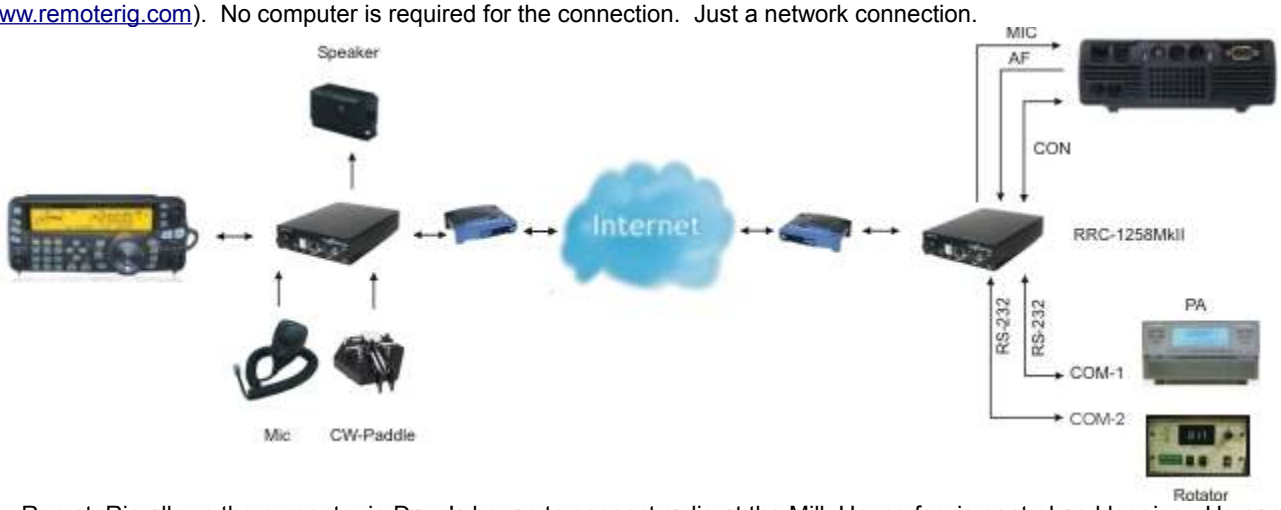


Ken / N3IYX added an external monitor to augment the tiny screen of the IC-7000.

Illustration 1: The IC-7000 will decode RTTY on its display

The club's Icom 706MIIG is now set up for digi modes with the club's Signalink and connected to a computer for rig control.

Dave / K3GMT set up his new Kenwood TS-480 to work remotely. The radio is located at the Milk House and the control head is located at his house. The head unit and radio are connected through the internet using a RemoteRig interface (www.remoterig.com). No computer is required for the connection. Just a network connection.



The RemoteRig allows the computer in Dave's house to connect radio at the Milk House for rig control and logging. He can a run SSB, CW, FSK RTTY, and other digi modes remotely with no computer connection at the Milk House.

The Milk House is open every Tuesday, Wednesday and most Saturdays. Stop by your club station and work some contacts.

de **K3GMT**

HAM RADIO OPERATORS CONCERNED ABOUT LOSING BAND

By Didi Tang and Malia Rulon, USA TODAY

Ham radio enthusiasts nationwide are concerned about a bill in Congress that they say would limit their ability to help in disasters and emergencies. Rep. Pete King, R-N.Y., chairman of the Homeland Security Committee, introduced legislation last month aimed at enhancing emergency communications for first responders by reallocating certain frequencies exclusively for public safety. To offset lost revenue from that change, the bill includes a provision that would allow the 420-440 MHz frequencies currently provided free to amateur radio to be auctioned off. Those frequencies are used not just by hobbyists but also by hundreds of thousands of Amateur Radio Emergency Service volunteers and severe-weather spotters working with National Weather Service. "They are a critical component of the National Weather Service's job to protect life and property," said Steve Runnels, a warning coordination meteorologist with the National Weather Service in Missouri. "It's a bad idea. It's not good for public safety," said Harlin McEwen, chairman of a technology committee for the International Association of Chiefs of Police and a spokesman for the National Public Safety Telecommunications Council.

The frequencies set aside for first responders in the bill became available after the digital transition from analog television broadcasting. The Federal Communications Commission was going to auction off those frequencies. The White House calculates the cost of reallocating them for first responders at $3.2 billion. King stressed the importance of following a 9/11 Commission recommendation to develop a national wireless network for first responders. "America's first responders, including law enforcement officers and firefighters, these front-line heroes still do not have a national interoperable public safety wireless broadband network," King said. He added that efforts are underway to address concerns of ham radio operators and others. Rep. Billy Long, R-Mo., a co-sponsor of the bill, said he will work "to ensure that we are not cutting any vital emergency services and not adversely affecting ham radio operations."

THE BIG ONE

SATERN CW Net Training Bulletin

http://www.emergencycommunication.org

3-18-2011

Most Emergency Communications (ECOM) activities in North America seem to place Amateur Radio in the background. In other words, the radio amateur plays the roll of emergency management volunteer with the access to radio communications being a value-added feature. Disasters in which Amateur Radio must step-in and fill a void left by a failed public safety or government telecommunications system are very rare. Most of us will spend a lifetime in Amateur Radio and never encounter an environment in which our services are necessary in this critical roll.

The nature of modern ECOM work is such that many radio amateurs assume they are well prepared when they participate in a local exercise, enjoy field day, and provide support for the occasional minor emergency, foot race, or similar event. While there is no doubt such activities provided worthwhile training; such activities can create a false sense of preparedness. Few of us really ask “am I properly trained and equipped to provide an efficient service in the event of a major disaster? ” Worse yet, some have come to believe real ECOM capabilities are no longer needed.

Recent news coverage of the catastrophe in Japan has once again created the impression that the Internet is the ECOM “hero” of the day. Numerous articles have appeared on television news programs featuring the use of Skype, e-mail, and similar Internet services to connect families in North America with their loved ones in Japan. Undoubtedly, the average citizen assumes the Internet has survived the disaster just fine while overlooking the fact that nearly every example involves individuals far outside the actual disaster area.

In reality, a major earthquake, Tsunami, or similar devastating event would disrupt numerous “modern” telecommunications systems. It would also create a wide range of problematic challenges for the ECOM volunteer.

***** Gasoline**

Many radio amateurs assume they are well prepared when they have a portable generator to operate their equipment in the field. However, many Americans in the Eastern States discovered that access to gasoline was problematic during the “great blackout” of August, 2003. Without electricity, gasoline pumps at the corner garage do not work. Gasoline becomes a rather valuable commodity in a very short time.

A disaster plan should take into account shortages of gasoline and a temporary regulatory regime, which implements the rationing of gasoline. Amateur Radio will be rather far back in line behind government agencies, NGOs, hospitals, utilities, and other essential services, all of which will be demanding access to scarce fuel supplies.

The ability to operate with low power, renewable energy resources, and methods which minimize fuel requirements are preferable. For example, using a generator to periodically charge a bank of float cells used to operate a ten or twenty watt CW transceiver may conserve far more fuel that running a generator continuously to power a 100-watt SSB transceiver and computer.

***** Transportation**

Most volunteer activities will require transportation. However, for the aforementioned reasons, gasoline may prove to be a scarce commodity. ECOM volunteers should make it a habit to keep the gasoline tank in their automobile half full. This is particularly true in areas where disaster can strike without warning, such as locations on an earthquake fault. Other disasters provide a bit of warning, such as potential tornado outbreaks or major winter storms, allowing one to fill up the tank and perhaps store some additional gasoline for a portable generator.

It’s a tall order to keep a tank half full under current economic conditions. However, by filling up when the tank reaches half, one can also ease the “cash flow” problems felt when one has to fill an entire tank to the tune of 70-dollars!

Many disasters will also disrupt roads and highways. Bridges can collapse, road beds can be washed out, and debris such as downed utility poles can make a road impassable. Therefore, one may want to ask “how do I provide communications from a location I can not reach by automobile? ” What happens if you must walk a mile to get to a location requiring communications support? Consider these points:

Are you in shape to do so? Amateur Radio is a sedentary hobby and it shows. Many radio amateurs are not in shape to walk up a couple flights of stairs, let alone walking a couple of miles over difficult terrain.

Do you have transportable equipment? Can you place a VHF-FM transceiver, a couple of gel-cells, a power supply and some antenna equipment in a backpack and transport them into the field?

Can you provide support in the field to disaster teams operating outside of “HT range? ” The wide coverage repeater you rely on may not be there in time of emergency, requiring one to access a distant repeater. How would you communicate? Consider portable repeaters, cross-band repeat, or a simple VHF or HF back-pack arrangement, which provides higher power output while transporting a larger gel-cell battery.

***** Types of Communications**

The local canoe marathon or foot race demands primarily tactical communications. However, what happens when one must transmit and receive real message traffic of genuine importance. Are you really equipped to transmit and receive a message on behalf of a public safety official? What happens when you are the individual responsible for conveying a message requesting a quantity of critical medications or personnel? Is it enough just to “say” I want this or that into the microphone?

Real disasters require solid, consistent communications skills, standardized procedures, and a universal message format. Anyone who tells you otherwise is simply misguided.

“Real” ECOM work can range from filling in a communications gap for first responders to setting up a message center for your neighborhood. For example, could you set up a station in your front yard and originate health and welfare messages for your neighborhood residents via a NTS net? The vast majority of radio amateurs are simply incapable of doing so efficiently.

***** Ask these questions:**

-- Am I familiar with the radiogram format? Can I format and transmit a radiogram without using the familiar message blanks?

-- Am I familiar with the standard ITU (ICAO) phonetic alphabet and the procedures spelling difficult words? What happens when I must report a release of “1, 2-Dichloroethane” or report an outbreak of an unusual disease while insuring there is absolutely no confusion at the delivery end?

-- Can I originate a message that includes all of the service data so that the recipient knows on whose authority the message originated, when the message originated, and from where the message originated?

***** Are we really prepared?**

Many ECOM volunteers seek out a special ID card or seek to feel a bit important by associating public safety officials. Some are well trained in HAZMAT awareness, NIMS, and ICS. Others walk around with government issued 800-MHz police radios. Yet, many of these men and women are NOT prepared to provide a real communications service.

As radio amateurs, we should be communicators first. The ability to convey information through multiple networks in a consistent, accurate, and efficient manner should be our primary skill set. The ability to establish survivable, effective radio communications from within a disaster area should be our primary capability.

If one chooses to be a reserve police officer, SAR specialist, or DAT volunteer, so much the better. However, such status does not make one a communications specialist. Only training and equipment designed to solve communications problems will fulfill that role.

Take some time today to give some thought to your ability to operate in the event of “the big one. ” Ask yourself if you and your family are really prepared.

73,

Jim Wades, WB8SIW <jameswades@gmail.com>

This is an excellent dissertation by James Wades on emergency communications. James is the Net Director for the New SATERN CW Net that begins in June on 30 meters.

REDNERS' SUPERMARKETS SAVE-A-TAPE PROGRAM

Here's how it works:

Redner's has a terrific program to support the Club **AT NO COST TO THEM**, if our members simply sign up for a Gas Card that records their shopping points, and give their cash register receipts to, **Pete / NL7XM,** He'll do the rest.

Note: This does not affect your gas points in any way.

HELP THE ENVIRONMENT

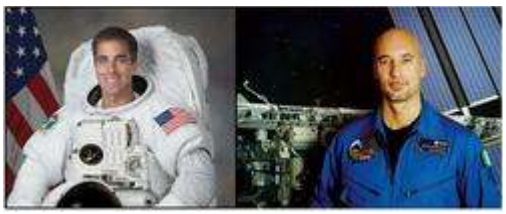
Donate your old, empty printer ink cartridges to the Club for recycling. Any brand, model, size or shape; color or black. Please bring them to the meeting in a leak proof ziplock type baggie and give them to Pete / NL7XM. This simple act can help your Club by reducing recurring expenses, and make you feel a lot better about our environment**.**

AMATEUR RADIO IN SPACE

Two Astronauts Get Their Ham Ticket

Even though they aren't scheduled to go to the International Space Station until 2013, two astronauts -- Chris Cassidy and Luca Parmitano -- are now licensed amateurs. Cassidy, who received the call sign KF5KDR, is scheduled to head to the ISS in March 2013 as part of Expedition 35. Parmitano -- an Italian from the European Space Agency -- is KF5KDP; he goes to the ISS three months later in May, as part of Expedition 36.

"Our aim is to have at least one crew member licensed and trained in on-air protocol, who is somewhat excited about ham radio and the Amateur Radio on the International Space Station program, per expedition," explained ARRL ARISS Program Manager Rosalie White, K1STO. NASA ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, told the ARRL that both Cassidy and Parmitano are "excited and interested in the educational aspects of Amateur Radio on board the ISS."



Chris Cassidy, KF5KDR (left), and Luca Parmatano, KF5KDP, will journey to the International Space Station in 2013.

FIELD DAY 2011

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. Each year over 35,000 amateurs gather with their clubs, friends or simply by themselves to operate.

ARRL Field Day is not a fully adjudicated contest, which explains much of its popularity. It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, most groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to local elected community leaders, key individuals with the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar.

The 2011 Field Day will be held on the week end of June 25th and 26th. At the Louise Moore Park in Bethlehem Township. The DLARC will be located in Pavilion #5 which is located on the east side of Country Club Road. The same location as last years picnic.

Tom / KB3IUE is chairman of this event and will be looking for volunteers to help with all phases of the event. A sheet will be at both the May and June meeting for signing up. Help is needed with setting up, tearing down and also putting together the food and drink.

GPS THREATENED

WASHINGTON – A new, ultra-fast wireless Internet network is threatening to overpower GPS signals across the U.S. and interfere with everything from airplanes to police cars to consumer navigation devices.

The problem stems from a recent government decision to let a Virginia company called LightSquared build a nationwide broadband network using airwaves next to those used for GPS. Manufacturers of GPS equipment warn that strong signals from the planned network could jam existing navigation systems.

A technical fix could be expensive — billions of dollars by one estimate — and there's no agreement on who should pay. Government officials pledge to block LightSquared from turning on its network as scheduled this year unless they receive assurances that GPS systems will still work.

The stakes are high not only for the GPS industry and its users, but also for those who would use LightSquared's network. In approving it, the Federal Communications Commission seeks to boost wireless competition and bring faster and cheaper Internet connections to all Americans — even in remote corners of the country.

LightSquared and the FCC both insist the new network can co-exist with GPS systems. But device makers fear GPS signals will suffer the way a radio station can get drowned out by a stronger broadcast in a nearby channel.

The problem, they say, is that sensitive satellite receivers — designed to pick up relatively weak signals coming from space — could be overwhelmed when LightSquared starts sending high-power signals from as many as 40,000 transmitters on the ground using the airwaves next door.

"The potential impact of GPS interference is so vast, it's hard to get your head around," said Jim Kirkland, vice president and general counsel of Trimble Navigation Ltd., which makes GPS systems. "Think 40,000 GPS dead spots covering millions of square miles in cities and towns throughout the U.S."

One of the biggest risks is to the GPS navigation systems used by about 40 percent of commercial and private planes. Backup systems that rely on ground-based radio signals are not as accurate and have coverage gaps. Some older private planes have no backup at all.

With GPS interference, a pilot "may go off course and not even realize it," said Chris Dancy, a spokesman for the Aircraft Owners and Pilots Association.

LightSquared's network could also undermine the Federal Aviation Administration's multi-billion-dollar program to upgrade the nation's air-traffic control system, which is based on World War II-era radar technology.

The new GPS-based system is more precise and lets planes fly more direct routes. That will save airlines time, money and fuel and cut pollution. It is also key to accommodating projected increases in airline traffic by enabling planes to fly safely closer together.

Public-safety officials, too, are nervous about LightSquared because they rely on GPS to track and dispatch police cars, fire trucks and ambulances. Many 911 systems also use GPS to help locate people. Disruptions could delay responses to emergencies, said Harlin McEwen, an official with the International Association of Chiefs of Police.

Even the Pentagon has expressed concern as it relies on GPS to guide planes, ships, armored vehicles, weapons and troops.

LightSquared plans to compete nationally with super-fast, fourth-generation wireless services being rolled out by the likes of AT&T and Verizon Wireless. It won't sell directly to consumers, though. Instead, LightSquared will provide network access to companies including Leap Wireless, parent of the Cricket phone service, and Best Buy, which will rebrand the service under its own name.

LightSquared has its roots as a satellite-phone operator, so its airwaves historically have been reserved primarily for satellite communications. FCC rules adopted in 2003 allowed the company to back up those signals with ground-based wireless service, but only to fill in coverage gaps.

In January, however, the FCC gave LightSquared permission to use its airwaves for a broader, conventional wireless data network. Although the company will continue to offer satellite service, it plans to cover at least 92 percent of Americans by 2015 with high-power wireless signals transmitted by base stations on earth.

Until now, GPS receivers haven't had much trouble filtering out noise in the adjacent airwaves because it consisted mostly of low-power signals beamed from space. But GPS manufacturers warn that will change once there is a major ground-based broadband network.

Both LightSquared and the FCC say further testing is needed to determine the true extent of any interference. The FCC is requiring LightSquared to participate in a study group with GPS manufacturers and users.

LightSquared won't be allowed to turn on its network until the government is satisfied that any problems are addressed, FCC spokesman Rob Kenny said.

"We have every reason to resolve these concerns because we want to make sure there is a robust GPS system," LightSquared executive vice president Jeffrey Carlisle said.

Dan Hays, a consultant with the firm PRTM, insists the technical solution is straightforward: GPS devices need to include better filters to screen out the LightSquared signals.

Estimates on the costs of a fix, however, range widely.

Hays believes it will cost no more than $12 million — or 30 cents per device — to install better filters in roughly 40 million standalone GPS units made worldwide each year. Cell phones, he said, will be fine because they don't rely solely on GPS to determine location and have better filters anyway.

But Tim Farrar, a consultant with TMF Associates, insists cellphones need upgrades, too — raising the annual cost to as much as $1 billion.

Tens of billions of dollars of existing equipment may also need to be replaced, Farrar said.

GPS manufacturers insist that neither they nor their customers should have to pay.

That's because GPS receivers were designed to screen out low-power signals next door, and now the government is changing the rules, said Scott Burgett, software engineering manager with Garmin Ltd.

But Hays said GPS receivers are "eavesdropping on signals outside of where they are supposed to be" — in LightSquared's space.

That was not a problem — until now.

Moreover, LightSquared and the FCC say the GPS industry should have been preparing for a ground-based network nearby since the FCC first allowed backup wireless systems in that space in 2003.

The real dilemma, Hays said, is this: "This is a situation where the neighbor built the fence too far over the property line and may not have realized it at the time. Now the other neighbor wants to build a pool and there is not enough space. So the question is: who has to pay to move the fence?"

Associated Press Writer Joan Lowy in Washington contributed to this report.

RACES EMERGENCY REQUIREMENTS

As of September 2006, NIMS IS-700 and ICS-100 course certifications are required in order to receive the county issued photo IDs. The photo IDs are required by federal law for participation in, on site RACES emergency operations. These courses can be taken on line by going to www.fema.gov and following the directions. These requirements are not needed to participate in the weekly Wednesday nets. The only requirement for these nets is a valid amateur radio license and an interest in emergency communications.

WEDNESDAY NIGHT NETS

Additional Net Controls are needed for the Wednesday Night ARES, RACES & DLARC net. If we have enough interested operators, it will only be necessary for each operator to have only one net session in each three month period. Actually 13 weeks in a period, so 13 net controls would be ideal, and maybe some extras to fill in if needed. This would give us a pool of experienced controls, for any emergency which would arise. Interested operators should contact **Don / KC3II** at kc3ii@arrl.net. The NIMS IS-700 and ICS-100 courses are not required to be a net control, but should the need arise and we do supply controls and operators for real emergencies, then the courses requirement will be in effect and EMA issued IDs will be needed to be on the scene of an emergency.

F.Y.I.

The winners of the April Prizes were **Ed / K3IFE, Lyle / KB3SXI** and **Bob / KB3ULG**
The June Program will be **Al / W3CE** APRS (Automatic Packet Reporting System), Live Demo

The D.L.A.R.C. meets the "FIRST" Thursday of each month. Membership, friends and interested persons meet at the Nancy Run Fire Company Social Hall (3564 Easton Avenue, Bethlehem, Pa. 18020) at 7:30 PM. Committee reports and announcements of all present and future activities will be presented at that time. Followed by that month's program.

The EASTERN PENNSYLVANIA District 2 ARES Net meets every Wednesday at 1930 hours local time. (Just after the DLARC Net) On 147.255 (pl 162.2). And linked to 449.375 on Blue Mountain, 443.350 in Allentown and 147.180 in Berks County.

D-Star Mid-Atlantic Regional net meets the second and fourth Tuesdays of each month on the 147.165 port with a number of other repeaters in Eastern Pennsylvania, New Jersey and New York City area .

The OK Corral is an organization publication for the purpose of informing members of the D.L.A.R.C. of educational and training opportunities, club events, relevant news articles and a monthly calendar of daily activities, meetings and dates. Every member of the D.L.A.R.C. Is welcome to contribute articles of interest to this newsletter. Opinions, items of interest, and even suggestions towards the improvement of newsletter and/or the DLARC, itself would also be accepted, as a sort of "Letters to the Editor" section.

The Milkhouse telephone number is 484-895-7038.

EXECUTIVE COMMITTEE 2009 – 2010
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PHONE NUMBERS FOR THE EXECUTIVE COMMITTEE OF THE DLARC CAN BE FOUND ON THE WEBSITE / MEMBERSHIP LISTING

CLUB MEETINGS

All regular meetings of the D.L.A.R.C. Are held on the first Thursday of each month at 7:30 PM at the Nancy Run Fire Company
TALK IN ON 146.700 (PL 151.4)

THE W3OK TRUSTEE --- DON REAMER / KA3JWE

The W3OK Corral is published monthly and is the Official Publication of the
DELAWARE LEHIGH AMATEUR RADIO CLUB INC.
14 Gracedale Avenue
Nazareth, Pa. 18064-9211

ARES, RACES AND DLARC NET

All Radio Amateurs are welcome to participate in the ARES, RACES and DLARC net. This net meets Wednesday at 1900 hours local time, on the W3OK Repeater 51.76, 146.70 and 444.90 (pl 151.4). With an alternate frequency of 147.370 (167.9) W3OI Repeater.

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