



**GREAT FUNDRAISER!**  
THANK YOU FROM  
KIDZ RADIOACTIVE!



**WINTERFEST!**  
FEB 24 AUGUSTA  
Hamfest



**SYMPOSIUM 2018!!!**  
HAM RADIO -  
TECHNOLOGY -  
ROBOTICS

# Signals Downeast

# LONG PATH

A Quarterly Profile

## New Ham & Entrepreneur Hunter Dolan - KC1IDU

Hunter Dolan grew up amidst the vast cornfields of Illinois. That is where he developed his passion for computers and other technology. Not farming. Computers. He began programming at age 10 and by the time he was in high school, he was creating web pages and other Internet applications professionally.



Like rural Maine in the early part of this latest century, many households in Hunter's area had to endure slow dial-up connections to access the Internet. This was frustrating to him so he devised a plan to get higher speed access. There was a company that offered broadband wireless connections, but the service was too expensive for his family to get. Hunter saw the company's web site and thought it needed a lot of work. He saw an opportunity and grabbed it. He contacted the wireless company and made an offer in exchange

Hunter Dolan  
KC1IDU

Ham Radio is

"Mind Blowing"

for free Internet. He told them that “his mother” could create them a much better website. They accepted the offer. Of course, it was Hunter, not his mother, doing the work, and Hunter is pretty sure the wireless company folk knew it! How’s that for entrepreneurship?

After studying computer science for a couple of years in college, Hunter moved out to California, where he worked for a company which he and a couple friends started, called Toga. It is a smartphone app helping college students around the country network and find events at their locations. They are in the process of selling the company now.

And now we come to Maine, because that is where Hunter moved next, to Jonesboro, where he could be closer to family. He still works in the computer industry as a freelance programmer, writing programs in Python, Javascript, and Go, among other languages, but he gets to do it on-line right from his home, instead of commuting to an office. He is planning another startup company soon, this time in computer consulting.

Last September Hunter earned his ham radio license at the VE session in Steuben and was issued the callsign KC1IDU. At 22, Hunter is in that age group that many hams wonder what it is that could peak an interest in amateur radio? For Hunter, it was an RTL-SDR dongle that got him excited in the possibilities ham radio could offer.

Three years ago, while still in Illinois, he was working on an Arduino project which had two micro-controllers that were not communicating with each other. He bought the RTL-SDR dongle to help in debugging the project.

“I saw the spectrogram and the waterfall and thought - hey - that’s really cool,” said Hunter during a recent interview. He was able to see and hear FM broadcasts with the device, but wanted more. He added an up-converter and was able to monitor the shortwave bands. He hooked up a random wire antenna and was amazed that from the cornfields in Illinois, he could hear stations in China. Now he could see the potential of ham radio!

Another piece of technology Hunter is a fan of that is quite popular in ham radio and in schools is the credit card-sized Raspberry Pi computer. “I like the concept of having a little computer you can put anywhere. They are very versatile,” he said. Hunter feels that the Arduinos were too limiting for him, while on the Rpi he can write code, and have it perform many other common chores larger computers can do. Hunter joined the Maine Ham Radio Society after he got his ticket, and is looking forward



## Sunday

Thanks W1KRP for use of the image!

## Projects Schedule

Join hams in  
Ellsworth on the  
following Sundays at  
noon to work on  
projects, theirs or  
yours. Or just play  
radio or socialize.

Feb 4

Feb 18

Mar 4

Mar 18

### Location:

Meadow View Phase IV  
Dining Hall, 25 Tweedie  
Lane, Ellsworth, ME

to the club incorporating the Rpi with APRS and a high altitude balloon launch, which MHRS is planning along with hams in the Ellsworth area.

Hunter's main interests in amateur radio are the digital modes. He just ordered a USB Signalink and is looking forward to its arrival! "The whole concept of a decentralized automated communication network is really interesting to me," he said. So the odds are looking good that KC1IDU will be seen on Winlink, packet radio, and many of the new digital modes very soon!

Another ham radio attribute that Hunter deems useful is that he sees many similarities of the old dial-up internet, "which is the foundation of how computers talk to each other."

"If you can understand how it works at that level, then you begin to understand how computers communicate with current technology," said Hunter. He believes many aspects of amateur radio can help him become better at his profession in computers. For example, learning how the digital modes work would increase his knowledge and benefit him in his work.

"Everything is going wireless in the next 20 years," said Hunter. "There will be no more broadband coming in on a landline." Ham radio and wireless Internet share similar concepts.

Hunter believes that many of today's teenagers would be interested in ham radio if they knew about some of the technological capabilities they could enjoy. "The concept that you can communicate with something that you built, that's in the sky, That's mind blowing!"

Hunter has advice for kids interested in pursuing careers in computers or engineering. "It is important to start somewhere, and ham radio is a great place to start to understand how computers talk to each other." He said because everything will be going wireless, a person would have nothing to lose by understanding how it works. He said college is a great place to learn the theory, but "the application is up to you."

"And you have to love it. Don't be afraid to break things.*[ed. Not in my shack please!]* Don't be afraid to go out and try to make some money by building an app. If you know how to do it, you've got nothing to lose at that point and everything to gain."

Hunter is planning on upgrading to General very soon. He is itching to get on the worldwide bands with voice and digital. If you hear him, welcome him to the amateur radio community!

## Upcoming Meetings

- EAWA Meeting Thursday, Feb 8 at 7:00pm at Meadow View Apts Phase IV Dining Hall, 25 Tweedie Ln, Ellsworth.
- MHRS Club Meeting, Thursday, Feb 15 at 6:00pm at Phil N1EP/Brenda N1ZPV home, 195 Kansas RD, Milbridge.

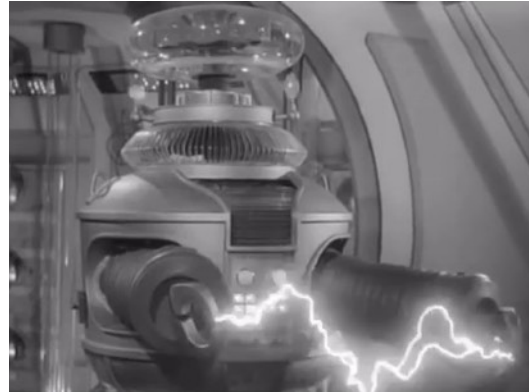
## Don't Miss The Hamfest!

**Saturday, February 24th** Le Club Calumet 334 West River Road Augusta Sponsor: Augusta Amateur Radio Association Talk-In: 146.88 (PL 100) Contact: Bill Crowley, K1NIT 512-0312 [k1nit@arrl.org](mailto:k1nit@arrl.org)

## Symposium May 19!!!! Be There!

Did someone say the “symposium” word? OMG! Yes, it’s true. Phil, N1EP is organizing another Ham Radio/Technology Symposium to be held on Saturday, May 19 from 9:00am until noon.

Demonstration of ham radio digital modes, including FT-8, APRS, and Packet radio will be on hand. Mega Builder Robotics, a kids robotics group from Ellsworth will be giving a presentation on their robot building skills. This could be an opportunity to see if ham radio can be incorporated with robotics projects. Perhaps merge ham radio - Hal 9000 - and the robot from Lost In Space?



There will be a fundraiser auction during the event to benefit Kidz radioActive. This is a new group dedicated to inspiring young folks through science, electronics, and amateur radio. If you have working ham radio, electronics, or computer items that you would like to donate for the auction, contact [phil@n1ep.com](mailto:phil@n1ep.com).

The ARRL has graciously donated three \$25 gift certificates to use as raffle prizes. There will be other prizes as well, so maybe you will be lucky!

## Ham Radio Tests in the Afternoon

After the symposium, amateur radio exams will be given at 1300 (1pm). Cost is \$15 and a legal photo identification is required, and applicants must provide either their social security number or an FCC registration number, which they can obtain in advance at [www.fcc.gov](http://www.fcc.gov).

*Both of these events will take place at Meadow View Phase IV Dining Hall, 25 Tweedie Lane, in Ellsworth.*

**TEST NOTE:** There will also be ham radio exams given at the Henry D. Moore Library in Steuben on Wednesday, March 14 at 6:00 pm.

### Local Nets

- Mondays      DownEast Information & Emergency Net 146.595 at 1830 (6:30 pm).  
Washington County ARES Net 147.330+ (PL 118.8) at 1900 (7:00 pm).
- Tuesdays    Digital Net 146.910- (PL 151.4) repeater at 1830 (6:30 pm)  
Hancock County EmComm Net 146.910 repeater at 1900 (7pm)
- Wednesday   Ellsworth Amateur Wireless Assn on-air meeting 147.030+ (pl 100) at 1900
- M - Sat        Maine Seagull Net 1700 (5pm) 3940 kilocycles
- M - F          Maine Slow Speed Net (CW) 1800 (6pm) 3585 kilocycles.
- M - Sun        Pine Tree Net (CW) 1900 on 3596 kilocycles
- Sundays        Maine Public Service Net 0900 frequency 3940 kilocycles  
  
Twelve County Emcomm Net 0930 KQ1L linked repeater system.  
  
Maine Emergency Comm Net 1700 on 3940 kilocycles backup 7262 kilocycles

### A Great Start For Kidz radioActive!

Its mission is to inspire young people through science, electronics, and amateur radio. The group raised more than \$1000 in the first few weeks since forming, and needs to raise more. School projects, events at public libraries, and more are scheduled, and the group will be filing for federal nonprofit status soon. If you would like to donate, you can mail your contribution to Phil Duggan, Kidz radioActive, 195 Kansas RD, Milbridge, ME 04658. Or you can donate on-line at <https://www.youcaring.com/kidzradioactiveorg-1035957>



**THANK  
YOU!**