

PEAKS & NULLS

Volume VI, Issue IV April 13, 2017

IT'S NOT TOO LATE

If you know someone who wants to get a license it's not too late to get signed up for Noel's class. There will be two introduction sessions next week. Monday April 17th at 6:30 PM before the club meeting and Thursday April 20th at 7 PM. They will be held where we hold our club meetings and attendance is required at only one of them, They can register by email at hamcram@morrisradioclub.org.

FINALLY SOME GOOD NEWS (MAYBE?)

Last month was pretty bad for propagation with 15 days in a row with no sunspots and 16 out of 17 days with a blank sun followed by a large uptick in April with a Sunspot number of 97 on April 3.

In other good news the first Sunspot of Cycle 25 was spotted on December 18, 2016. It was a high-latitude Sunspot with a reverse magnetic polarity from the Cycle 24 Sunspots. Those two items designate it as being a Cycle 25 spot that appeared earlier than expected. So does this mean that we're past the worse part. Not by a long shot. The solar minimum between the first spot of Cycle 24 and the last spot of Cycle 23 was fourteen months. If this time holds true for Cycle 24 and 25 then we might see the minimum occur in early 2018.

Leif Svalgaard of Stanford University wrote a paper in August 2016 on Prediction of Solar Cycles based on using the observations of polar field strength during the minimum to predict the strength of the next cycle. In the paper he states that we should predict the F10.7 flux instead of the sunspot number because we seem to be loosing the smaller sunspots. They may be missing or not visible. The observations of the Toroidal Field as of the date of the paper showed that Cycle 25 had begun. This technique shows great promise seeing that the first visible sunspot showed up in December.

So what does this mean for Cycle 25 well, based on their data it looks like a repeat of Cycle 24, or at least not any smaller which is in contrast to other groups predicting that cycle 25 will be smaller. But, based on the data that they took in September, if the fields continue moving the way they are Cycle 25 could be stronger than Cycle 24.

One way or the other it will probably be another five years before we know who is right.

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UPCOMING MEETINGS		
April 17, 2017 6:30 - 7:30 PM Ham-Cram Introduction Meeting #1	1	
April 17, 2017 7:30 PM Regular Business Meeting		
April 20, 2017 7:00 - 8:00 PM Ham-Cram Introduction Meeting #2		
May 15, 2017 7:30 PM Regular Business Meeting		
May 20, 2017 8:30 AM - 3:00 PM Ham-Cram Morris Police & Fire Academy		
May 20, 2017 3:00 PM - 5:00 PM Open VE Exam		
June 19, 2017 7:30 PM Regular Business Meeting—Field Day Discussion		
June 24 - 25 Field Day Brickyard Field Bee Meadow Park		

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2017DUES

2017 DUES

Noel NO2EL is now accepting dues payments for 2017. \$15.00 for full membership, \$10.00 for associate. If you have a PayPal account, dues can now be paid by using Pay-Pal.

SELECTED UPCOMING CONTESTS

10-10 Int. Spring Contest, CW	0001Z, May 6 to 2359Z, May 7
ARI International DX Contest	1200Z, May 6 to 1159Z, May 7
7th Call Area QSO Party	1300Z, May 6 to 0700Z, May 7
Indiana QSO Party	1600Z, May 6 to 0400Z, May 7
Delaware QSO Party	1700Z, May 6 to 2359Z, May 7
New England QSO Party	2000Z, May 6 to 2400Z, May 7
VOLTA WW RTTY Contest	1200Z, May 13 to 1200Z, May 14
His Maj. King of Spain Contest, CW	1200Z, May 20 to 1200Z, May 21
CQ WW WPX Contest, CW	0000Z, May 27 to 2400Z, May 28

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	T NUMBER AND RADIO R MAY 2016		
SUNSPOT NUMBER	***10.7 RADIO FLUX***		
PREDICTED HIGH LOW	PREDICTED HIGH LOW		
26.6 36.6 16.6	83.5 92.5 74.5		
MARCH MEETING MIN	UTES		
Morris Radio Club – Meeting Min-	perwork to computers and we can now file on line.		
utes March 20, 2017	Sid K2GG moved that the Treasur-		
Attendees (8) K2EMJ, K2GG, NO2EL, W2GM, WA2VQF, WR2G, WS2Q and three visitors KA2PBT, KD2JGS, KB2GGK	ers report be accepted. Mark W2GM Seconded. The Treasurers report was accepted.		
A quorum was present.	Old Business:		
Opening of Meeting	Noel has now scheduled the Ham-		
President Ed opened the meeting at 7:31 PM	Cram course for Saturday May 20th with two introductory meetings set for April. Students only have to at- tend one of the two introductory		
Reports:	meetings. The secretary will send the flyer will be sent out to all mem-		
Secretary – Bill WA2VQF re-	bers and clubs in NNJ.		
ported that the February Minutes were issued in the March Peaks and Nulls Newsletter. There were no reported discrepancies.	There will also be an open exam be- ing held at 3 PM on the 20th after the course. Noel reports that he al- ready has four students.		
Craig WR2G moved that the Sec- retary report be accepted. Mark W2GM Seconded. The Secretary	Ed has not yet contacted DX Engi- neering about a on line program.		
report was accepted.	New Business:		
Noel NO2EL presented the treas- urers report for March. The ac- tual account balances are avail-	Sid K2GG moved that the meeting be closed. Mark WR2G Seconded.		
able from Noel.	President Ed closed the business portion of the meeting at 7:50 PM.		
Noel reported that the State of NJ has notified him that they have transferred the incorporation pa-	After the business meeting Steve ROSCHEWSK KA2PBT gave a		



I'm Rob Roschewsk, KA2PBT and I would like to be your Northern New Jersey Section Manager.

I believe my decades of experience in Amateur Radio coupled with organizational skills, passion for youth mentoring, and commitment to community service uniquely qualify me for this leadership role. My goal as Section Manager is to continue to use my diverse interests and background to promote all facets of Amateur Radio with a special focus on youth activities, building and making, radio sport and public service.

My wife Lee and I reside in Central Warren County. I have two college age children, Samantha and Nick (KD2HBR).

I received my NOVICE license on 4/16/1982, and upgraded to TECHNICIAN later that summer at the FCC Field office on Varick Street in NYC.

When the Volunteer Examiner program started, I practiced code hoping

to upgrade to GENERAL, instead I upgraded to ADVANCED and passed the 20 WPM code exam. I failed the EXTRA exam during that session but returned the following month and passed. I have held an EXTRA class license since 6/3/1986.

I have a B.S. In Computer Science from the College of Staten Island (CUNY). I currently work as a Server and Network engineer in the Telecommunications sector.

In the early 80s, as a young college student in Staten Island, I collaborated with Carl Glovinsky, WA2IAF (sk) to build a repeater controller based on a TRS-80 Color Computer. The controller included a speech synthesizer, autopatch, time of day, outside temperature, WEST-LINK reports, and many other housekeeping functions. It also included a 6-second digital voice storage recorder that could be used for ID tail messages. For the 80s it was an impressive piece of work!

I started with Packet Radio while it was still in its infancy. I built a TAPR TNC-1 and was one of only a handful of stations in the Northeast on 145.01 at the time.

I was active on satellites, particularly the "Russian Birds" RS-6 and RS-8. I decoded data from the University of Surrey satellites UoSAT OSCARS 9 & 11 using a repurposed BELL-202 MODEM. Later I hand built a PSK modem to work the first microsats in particular AO-16.

I am the primary developer of **MULTIRX**, a GNU RADIO application designed to support volunteer first responders in Warren County. Using an inexpensive RTL-SDR dongle, **all** of the first-responder channels in the county are received, recorded and streamed on the web **simultaneously**. This is **NOT** a scanner! Crew members can listen to developing incidents using their cell phone or other internet device. The recorded audio has been used to council more junior team members on proper radio protocol.

Recently, I have been very involved with youth activities in Warren County, NJ. I am a founding member of the <u>721st Mechanized Contest Battalion</u>, our mission statement:

"We specialize in showing youth the power of Amateur (Ham) Radio to tie together Electronics, Engineering, Mechanics, Building and Making."

The 721MCB and I have worked with my good friend Carole Perry, WB2MGP to send students to present at the **Dayton Hamvention** three times. In 2013 the team designed, built and presented <u>E-APS:</u> <u>The Emergency Antenna Platform System</u>, a pole climbing robot to carry antenna up lamp posts to improve communications in emergency situations. In 2014, a student presented "Band-in-a-Bucket" an

HF antenna built with 3D printed parts, stored in a two gallon paint pail, ready for rapid deployment. In 2016, two students presented the "SAR Antenna" a collapsible yet ridged VHF antenna carried by Search and Rescue Teams in "go packs" to extend range.

At World Maker Faire 2013 in Queens, NY, E-APS, "the pole climbing antenna built by the kids in the green shirts" was exhibited and awarded a blue ribbon for "Editor's Choice". The project appeared on a <u>BBC report</u> about the event, featured on the build site "<u>Hack-a-Day</u>", and has appeared in other local and national media.

I am on the board of <u>Warren County Technical School</u> and have used that position to promote Amateur Radio activities. The school hosted an <u>ARISS contact in November 2013</u> where Luca Parmitano KF5KDP answered ten students' questions. The school has a fully functioning HF station and has participated in on-the-air events like "School Club Roundup". The 721MCB VE team typically holds a VE session for students once a year during school hours.

In 2016, I presented at the Dayton Hamvention Instructors Forum where the topic of my talk was "Advancing Amateur Radio in the School System".

I am a coach-mentor for Warren Tech's FIRST Tech Challenge robotics Team 5339 since 2013.

I participate Warren County RACES and have FEMA certification for ICS-100, ICS-200, IS-00700.a, IS-00800.b. I am occasionally the voice behind WC2EM during the monthly NJ State check-in.

References

KA2PBT on the WEB - http://ka2pbt.com/

TWITTER - @ka2pbt

721st Mechanized Contest Battalion - http://wc2fd.com/

The Emergency Antenna Platform System (Dayton 2013) - http://wc2fd.com/eaps/

Band in a Bucket (Dayton 2014) - http://wc2fd.com/biab/

WCTS ARISS contact - http://wc2fd.com/ariss/

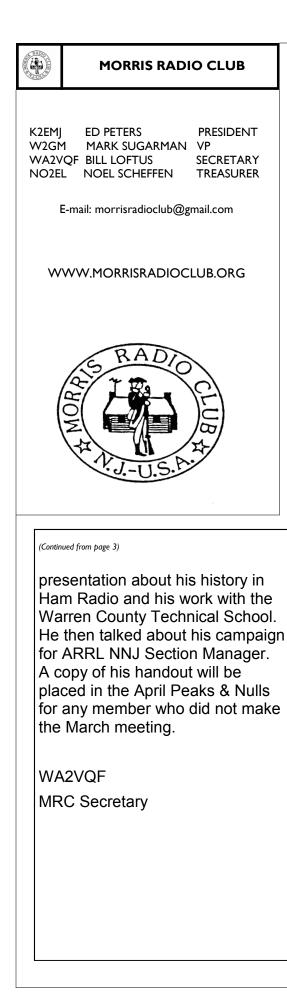
Advancing Amateur Radio in the School System (Dayton 2016) - http://pabut.org/dayton2016/

The MULTIRX System - http://aws.pabut.org/

MULTIRX source on GITHUB - https://github.com/pabutusa/multirx

That time my callsign flew on Uosat Oscar-9 - http://ka2pbt.com/uosat-9-data.html





THE MORRIS RADIO CLUB IS AN ORGANIZATION OF AMATEUR RADIO OPERATORS WHICH HAS BEEN IN EXISTENCE FOR OVER SIXTY FIVE YEARS. AS A HOBBY, AMATEUR RADIO SERVES AS A PUBLIC RESOURCE FOR COMMUNICATIONS AS WELL AS AN EDUCATIONAL EXPERIENCE.

ALTHOUGH MANY WHO BECOME INTERESTED IN AMATEUR RADIO ARE INVOLVED IN AN ELECTRONICS RELATED FIELD, THE HOBBY APPEALS TO A WIDE VARIETY OF INDIVIDUALS.

THE MEMBERSHIP OF THE MORRIS RADIO CLUB IS A DIVERSE GROUP MADE UP OF MEDICAL, BUSINESS, EDUCATION, AND LAW ENFORCEMENT PROFESSIONALS, AMONG OTHERS, WHOSE COMMON INTERESTS ARE COMMUNICATION, EDUCATION, AND PUBLIC SERVICE.

HAMFEST CALENDAR

North Jersey Hamfest

04/23/2017 **Location:** Roxbury Senior Center 72 Eyland Avene Succasunna, NJ 07876 **Website:** <u>http://www.splitrockara.org</u>

BARA Spring Hamfest

05/27/2017 **Location:** Westwood Regional Jr./Sr. High School 701 Ridgewood Road Township of Washington, NJ 07676 **Website:** <u>http://www.bara.org</u>