



www.marc-radio.org
P.O. BOX 557
EAGLEVILLE, PA
19408

REMARCS

Next Club Meeting: July 26th at 7:30 PM

JULY/AUGUST 2016

Presidents Message

As I write this, I'm still recovering from two hours of sleep at this year's MARC Field Day. Though it's left my body tired, my mind is full of great thoughts and experiences from a weekend spent with wonderful people who bring alive the spirit of ham radio. It's been an eventful time, as the MARC year – its 40th - approaches its activity climax, but there's plenty more in store!

Now that Steve, KD3WK, who ably served as our club's President for six years, is getting settled with his XYL into their new life in Florida, there have been some changes to the club's leadership. I have taken over as President, and Rich Russo, KB3VZL, who has served the club in many ways, most recently as our Programs Chair, has been elected Vice-President. We are honored to be tasked with these responsibilities, and look forward to the future.

Jim, W2JNF, and Jeff, AB2WM, did a wonderful job leading this year's field day, with valuable guidance from our Field Day Captain Emeritus Jim, K3RTU. While the bands weren't as cooperative as we had hoped, the weather was beautiful and we had a great opportunity to showcase amateur radio for the public, and practice our emergency preparedness skills. Many thanks to all those who came and helped with the set-up and tear-down of our equipment! At Field Day, I also had the opportunity to lead a Radio Merit Badge Session for the Boy Scouts, continuing the tradition pioneered by Steve, KD3WK and Doug, NE3U. At this session 26 engaged and enthusiastic Scouts earned their merit badge – the most who have ever attended this session, and many made contacts on the air, to places including Michigan, Indiana, and Ohio. I wish to thank Brian, AA3BK, my co-captain, and everyone else who made this event a success.

Coming up on July 9 is our Hamfest, another of MARC's annual highlights, as well as a great fundraising and publicity opportunity for our club. Please plan to attend the Hamfest, and if you are able, sign up to help out by contacting MARC's newsletter editor and long-time Hamfest Captain Mike Pilotti, KF3CD. This year is Mike's 20th Hamfest, and he would like to make way for new people to take the reins of this vital event. If you would be interested in helping out with the Hamfest, please contact me.

Finally, the antenna for our Newtown Square 147.060 repeater was recently replaced, and its coverage (as well as the link to the Paoli repeater) has been greatly improved. Check it out when you get a chance! Todd, K1TEW, has resurrected our weekly Wednesday night nets, and the improved repeater will help even more people participate in this staple activity of our club. Many thanks to our invaluable Technical Services guru Dennis, K3DS, for seeing these needed repairs and improvements through.

Best wishes for a great month ahead, and hope to see you soon at a MARC event or on the air!

73 de N2ZLQ Jeremy

VOX

Bill Dobson N3WD, from the W3 Incoming QSL Bureau, will once again have an indoor table at our hamfest. Bill can verify ARRL awards for DXCC (the only restriction is that he can't verify DXCC for 160 meters), WAS, WAC and VUCC so bring your QSL cards if you need these awards and you won't have to mail them to ARRL. Bill will also be selling envelopes for the incoming bureau.

Do you send QSL cards via the QSL Bureau? If so, you are welcome to bring your cards to the July meeting and MARC will ship them to 'The Buro' for you AND pay the processing fee! You must be a MARC member and an ARRL member to take advantage of this great deal and you must include a copy of your ARRL membership card or a QST magazine label. Your cards should be properly sorted and rubber banded, see <http://www.arrl.org/outgoing-qsl-service> for more info if needed.

INSIDE THIS ISSUE OF REMARCS:

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MARC's hamfest is the only hamfest in the western suburbs and many hams in the tri-state area look forward to this annual event. More than a few folks, some of which are personal friends of mine, have been coming to our hamfest every year since the early 1980's, when it was first held at The 309 Drive In Montgomeryville and then at The 611 Drive In Warrington.

Hamfest is Saturday, July 9th and we need your help. We especially need club members that can commit to arriving early on Saturday morning (5 to 6 AM) to collect admission and direct traffic. I am also seeking someone to staff and coordinate sales at the club table.

Club members are invited to bring ham radio related items to sell at the club table. Please be sure to tag your items with a price and your callsign. The club gets 10% of the sale of each item with the maximum being \$10 per item.

We also need volunteers to help with hamfest setup on Friday, July 8th starting at 5 PM. Set up involves setting up tables and chairs, installing signs and marking the outdoor tailgate area. If we have enough help, set up is quick and done between 7 and 8 PM.

Thank you to everyone that has signed up to help at the Kimberton Fair! Although the schedule appears to be filled, I would like two more volunteers, to take one of the two shifts that Dieter Hauer and Jim Smith have signed up for. Please take a look at the fair schedule on page 4 and let me know if you can relieve Dieter or Jim from one of their shifts. If you can help at the hamfest or fair, please let me know as soon as possible.

73 de Mike Pilotti, KF3CD
kf3cd@arrl.net



MARC Info

wb3joe@marc-radio.org
<http://www.marc-radio.org>

MEMBERSHIP MEETINGS:

4th Tuesdays of the month at 7:30 PM
(Doors open at 7:00 PM) at The Newtown Public Library,
201 Bishop Hollow Rd. in Newtown Square.

BOARD MEETINGS:

2nd Tuesdays of even months, 7:00 PM
Paoli Hospital, Willistown Meeting Room, Paoli, PA.
Members may attend as observers.

WB3JOE REPEATERS:

(CTCSS or PL = 131.8 hz)

145.130 - / 147.060 + / 147.360 + / 224.420 - / 224.5 -
/ 445.675 - / 444.050 -

The 145.13 and 147.06 2-meter repeaters are linked. The
147.36 MHz, the 224.50 MHz and the 444.050 MHz
repeaters are linked.

WEBMASTER:

Dennis Silage K3DS

k3ds@marc-radio.org

610-353-4829

2-METER NETS:

Club Net, Wednesdays, 8:30 PM

These nets occur on linked 145.13 - / 147.06 + Repeater

NET MANAGER: Todd Tew, K1TEW

NET CONTROL OP: Todd Tew, K1TEW

DUES:

\$15 Full (licensed Amateurs)

\$5 Associate (unlicensed persons)

Family rate \$5/ham - after first member
pays full dues

NEWSLETTER:

The REMARCS editor is Mike, KF3CD. Do you have
something to contribute to REMARCS? Please let Mike
know by sending an e-mail to kf3cd@arrl.net.



FRIDAY, JULY 8 @ 5 PM
Hamfest Setup

SATURDAY, JULY 9
Hamfest and VE Testing

TUES. JULY 26 @ 7:30 PM
Club Meeting- Topic To Be Announced + QSL Card
Collection for Buro

THURS. JULY 28, FRI. JULY 29 & SAT. JULY 30
Kimberton Fair

SAT AUGUST 6 @ 9 AM
VE Testing at Lower Providence Twp. Building

TUES. AUGUST 9 @ 7 PM
MARC Board Meeting- Paoli Hospital

SAT. AUGUST 13 @ 9 AM
MARC Breakfast- Country Squire Diner in
Broomall

TUES. AUGUST 23 @ 7:30 PM
Club Meeting- VHF Roving- Rick Kobak, K0BAK

SAT. SEPT. 10 @ 9 AM
MARC Breakfast- Country Squire Diner in
Broomall

TUES. SEPT 27 7:30 PM
Club Meeting- Oscilloscopes and Spectral
Analysis, George Riveria

Visit the calendar on the MARC website for details
and for events beyond September.

MARC Board of Directors 2016 – 2017

PRESIDENT
Jeremy Carlo N2ZLQ

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PUBLIC RELATIONS CHAIRMAN
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PROGRAM CHAIRMAN
Richard Russo KB3VZL

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MEMBERS-AT-LARGE
To 9/30/2016 -Doug Wilkens NE3U

ne3u@marc-radio.org 610-692-6819

To 9/30/2016 -Jim Smith K3RTU

k3rtu@marc-radio.org 610-494-5897

CALLSIGN TRUSTEES
WB3JOE- Dennis Silage K3DS

k3ds@marc-radio.org 610-353-4829

W3NWA- Dieter Hauer K3DK

k3dk@marc-radio.org 610-489-1920

May Club Meeting

At our May club meeting, Mark Humphrey K3XY, gave an excellent presentation on APRS. A big thank you to Mark! If you'd like to learn about APRS, a good place to start is at <http://www.aprs.org/>

The club also presented outgoing President Steve Werner KD3WK, with a plaque honoring his 6 years of service and the "gavel" was passed to new President, Jeremy Carlo N2ZLQ. Steve served as MARC President for the past 6 years, which gives him the prestigious distinction of being the person that has held this position for the longest time in our clubs history!



Kimberton Fair Schedule To Collect Parking Donations: 4 Volunteers Needed Per Shift

Thank you to those of you that signed up to collect parking donations at The Kimberton Fair! Technically, the schedule is filled BUT please note that Dieter Hauer and Jim Smith have generously signed up to work more than one shift, in order to help fulfill our commitment to the fire company. Thank you Dieter and Jim! However, no MARC members should have to work more than one shift. If you can take one of their shifts so that they don't have to work so hard, please let Mike, KF3CD know immediately.

*Thurs. July 28, 5 to 10+ PM

***This shift is longer due to fireworks**

Allan Glaser AB3FN, Bob Pain N3JIZ, Dieter Hauer K3DK, Jim Smith K3RTU

Friday, July 29: 5 to 9 PM

Michael Lebrun N3OMR, Rich Russo KB3VZL, Dieter Hauer K3DK, Doug Wilkens NE3U

Saturday, July 30: 1 to 5 PM

Mike Pilotti KF3CD, Jim Foster W3JNF, Jim Smith K3RTU, Ned Smith WQ3Z

Saturday, July 30: 5 to 9 PM

Jeff DeKonty AB3WM, Karen Bellamy KD3ACM, Ron Bellamy KD3ACL, Jim Upson K3JRU



MARC Board Meeting Minutes: June 14, 2016

Officers Present: Jeremy Carlo N2ZLQ, Rich Russo KB3VZL, Michael Lebrun N3OMR, Doug Wilkens NE3U, Jim Smith K3RTU, Dennis Silage K3DS, Bob Palin N3JIZ, Chris Ruhl N3GBJ

Officers Absent: Lou Ruh WX3I, Dieter Hauer K3DK, Jim Biddle W3DCL

- 1) Approved minutes of April 12, 2016 Board Meeting
- 2) Reviewed Treasurer's Report from Lou in absentia - accepted
 - a. Current account balance - \$9969.30
 - b. Paid membership status - 82
- 3) Steve (KD3WK) has relocated to Florida. Under the bylaws, VP Jeremy (N2ZLQ) has assumed the Presidency, leaving the VP slot temporarily vacant.

Election of new Vice President – Rich Russo, KB3VZL, was nominated and was elected per By-Law as stated below.

Per the By-Laws, Article III, Section 6: "If the office of any Director except President shall become vacant, a club member qualified as required in Section 2 shall be appointed following approval by a majority vote of the Board of Directors to complete the unexpired term. If less than 60 days remain in the term of office, the Board of Directors may choose to permit the office to remain vacant and to permit the normal election process to go forward."

- 4) Upcoming General Meeting Programs
 - a. Schedule for 2016
 - i. June – No Meeting – Field Day June 25-26
 - ii. July 26 – TBA (Lynnette Evans cancellation) – Jim Smith looking into providing a video called "Giants of the Air."
 - iii. August – Pete Kovak on roving
 - iv. September George Riveria – Oscilloscopes
 - v. October – Rich (KB3VZL) - Home Brew
 - vi. November – Elections; WT Jones, topic TBD
 - vii. December – Holiday Party / 40th Anniversary
- 5) 2016 Board Meeting Schedule
 - a. Does Paoli Hospital meeting room need to be confirmed for upcoming meetings? We will try meeting at the Newtown library on the same scheduled days but one hour before the membership meeting.
 - b. Previously scheduled dates: August 8, October 11, December 10 prior to Holiday Party
 - c. Jeremy can't make it to August 8 meeting. We will reschedule this meeting for the hour before the August monthly meeting, as a trial of this new venue.
- 6) Field Day Planning
 - i. Jim Foster has confirmed availability of the generator
 - ii. Safety officer will be Jim Foster, Bob Palin will oversee the setup.
 - iii. Individual members' first aid kits will be available
 - iv. Radio merit badge program - Jeremy will lead the program. Brian Kelly and Jim Foster have agreed to help out. Doug will as well, provided he is available. 25 Scouts have registered so far.

- 7) Hamfest – July 9 – no changes to advertising, ticket prices.
 - a. Mike Pilotti says he would like to step down from Hamfest planning, but will help for another year (his 20th). Ideas for replacements? – consider a committee rather than an individual to work with Mike next year to learn the ropes.
 - b. Michael Lebrun to send email to members asking for 5:00AM people to start organizing.
 - c. VE test sessions have been set up.
- 8) Holiday Party/40th Anniversary – Doug Wilkens will see if Kay and Carter Craigie can attend. We may elect to have a cake. Dennis Silage will see if he can put together a CD ROM with archival material for viewing and distribution.
 - i. Any reason to make changes from last year's plans – see above.
 - ii. Date set as Dec. 10, 2016.
- 9) New Business
 - a. Photo w/Newtown Library representatives – Michael Lebrun and Jeremy Carlo will schedule a picture session with the Director of the library.
 - b. The Newtown Square repeater now has a new antenna and power amplifier putting out 65-70 W compared to the previous 15 +/- W.
 - c. The Board approved an initial budget of \$2,000 for the repeater work. This is subject to review once the invoices are received.
 - d. Rich Russo suggested that we start our monthly meeting with the Pledge of Allegiance. We will determine at the next meeting if this practice will be accepted by all.

VE Test Sessions

No candidates preregistered therefore, our May 7 VE Test Session was cancelled. Our next MARC VE Test Session will be held on Saturday, July 9, 2016 at our Kimberton Hamfest starting at 10 AM. The remaining 2016 VE Test Dates: August 6, and November 5, will both be held at The Lower Providence Township Building in Eagleville, PA. Thank you and 73, Dick Stewart, K3ITH, MARC VE Liaison, k3ith@verizon.net

MARC Donates Books to Newtown Library



MARC recently donated a large assortment of new amateur radio related books and license manuals to our friends at The Newtown Library. From left: Rich Russo, KB3VZL, Michael Lebrun N3OMR, Arlene Caruso (Library Director), and Jeremy Carlo N2ZLQ.

Radnor Memorial Day Parade

A big thank you to the following MARC members that helped to provide communication services during The Radnor Memorial Day Parade!



From left: Jim Smith, K3RTU, Jim Foster W3JNF, Denise Burstein KB3ANO, Bob Palin N3JIZ, Floyd Schoenberg KA3OXA, Andrew Pavlin KA2DDO and Doug Wilkens NE3U.



MARC members Kevin K3NTD and Alexandra Perrot N3DZG, in their 1930 Model A "Bessie" during The Radnor Memorial Day Parade.

How I Became a Ham by Dennis Silage, K3DS



Dennis' sister Victoria, WB2PWI, at the controls of the 6 meter station she shared with her brother in 1963. The transmitter is a Heathkit Seneca. The receiver is an Ameco converter to a Lafayette KT-320 general coverage receiver.

I had become interested in electronics early on. There was a little store front radio-TV repair shop around the corner from my grandparents. My father Alex, who later became WB2UIM, had taken a GI Bill home study course after WW2, from the National Radio Institute on radio and television. He had all the books and the "Electronic Multitester" for the experiments.

I devoured most of the materials and by my freshman year in high school I was helping out at the radio-TV repair shop. Not too glamorous though: my job was to cut out useful components from defunct chassis and test them for reuse! The TV circuits were a little beyond me at this point. But I could check and fix an audio amplifier and the "All American Five" AM radio, so called because there was no power transformer and the filaments of the five vacuum tubes were wired in series across 120 VAC.

I learned about Amateur Radio from my Elmer: Benny Ciavatta K2CDH. He worked with my father at Roebling Steel in Trenton NJ. Benny was an A1 CW op with a Johnson Viking transmitter and RME receiver. He lived in a row house (we call them Town Houses now) with 40, 20, 15 and 10 meter dipoles strung up the only way possible: straight across the top of the two story row house. In those days, in fact for all my tests, exams were given by the FCC (no VEs!). Trenton was located more than 50 miles from either New York City or Philadelphia so I took my Novice test with 5 wpm Morse from K2CDH and was given a conditional license as WN2LGJ in 1963. The conditional license meant that the FCC could require that I appear in person to retake the exam!

The Novice license then was crystal controlled HF transmissions only, no voice privileges and could not be renewed after one year. As time was running out I took the Technician test from K2CDH, which was 5 wpm Morse and the General class theory and became WB2LGJ on 6 and 2 meters. I don't have a picture of me at the station in my bedroom, but here is my sister Victoria WB2PWI (still licensed) at the microphone. 6 meter AM and CW was the most popular band (no FM repeaters then) and the Heathkit Seneca shown was a pair of 60 W 6146 finals with a 5 element Cush-Craft Yagi on the roof of the row house. The homebrew MOSFET VHF converters used a Lafayette Radio KT-320 receiver as an IF.

I went off to Northeastern University to study Electrical Engineering in 1964 which had a very active station W1KBN. Next stop was the University of Pennsylvania in 1969 with its station W3ABT (now W3KZ and N3KZ). In this period I became active with the Delaware Valley Radio Association W2ZQ and built my first FM repeater: WR2ADE 146.67 West Trenton NJ (still on the air). I married Kathleen (no call) and moved to Yeadon in 1975 but was still a Technician. Tom Harris WA3RXE worked in my research lab at UPenn and was instrumental in helping me get over the "13 wpm hump". I was a Charter Member of the DCARA WR3ACU (now W3UER) Darby in 1977. I passed the Advanced in 1978 and the Extra in 1980 at the FCC in the William J. Green Federal Building in Philadelphia. I have an ARRL 25 wpm code proficiency certificate. I did have WB3AYR as a secondary station license in Yeadon but the FCC said no to secondary stations and I used WB2LGJ even though I was in "3 land" and at the time could have had an AK3 prefix call.

I left UPenn and went "across town" to Temple in 1984. I discovered that the WA3TVT Temple University Amateur Radio Club (TUARC), originally K3JKI, was adrift. The last trustee was a student who had graduated and the club license was about to expire. At that time the FCC was not giving new club licenses. I took over as trustee and obtained support by making it an active undergraduate lab starting with AMSAT operations.

TUARC has sponsors many student projects in "wireless technology". One of the projects was the rover vehicle shown using 146.55 MHz for telemetry and control and 426.25 MHz Amateur Radio fast scan color TV. The rover was featured in the November 2004 QST. TUARC became K3TU in 1995 at the same time that I became K3DS. TUARC remains an active station with 2 repeaters and 1.8 MHz through 1.2 GHz operation, see www.temple.edu/k3tu.

I have operated "over the pond" as G5EMU in 1983. I joined MARC in 1989 and remained a member of the DCARA at the "other side of Delaware County". MARC and the DCARA merged in 2012 and currently have 7 repeaters at four sites. I am the trustee for WB3JOE, MARC webmaster and Technical Committee. I have RTTY WAS on 40 and 20 meters and although not really a DXer I do have WAC and DXCC CW. My home station is a Kenwood TS2000, Mosely TA33 Yagi at 40 feet and an Alpha-Delta DX-A 160-80-40 meter 1/4 wave sloper.

Amateur Adventures by Kevin Perrot, K3NTD

Only the young lady, please!

During the ARRL International DX SSB Contest in March of 1987, my wife Alexandra, N3DZG, made a most memorable QSO with Bob in the Falkland Islands.

John Salyer, W3MA a neighbor, good friend, active contester was the former president of the Frankford Radio Club, which was very active in many contests. Their club was composed of skilled and devoted contesters, who presented a formidable, competitive team approach to a contest. If they participated in a contest then they were likely to win it. They were devoted, competent and enthusiastic. They maintained a spotter frequency on 2 meters. I may participate in various contests but take a different, laid back approach. I usually set a limit on my participation to an arbitrary number of contacts around 100. This way I could have the fun of participating in a contest without losing any sleep.

This world wide weekend contest was in the last throes and multipliers were the most sought after item. So Sunday late I heard on the 2 meter spotter frequency that there was a VP8BKK. There was usually a delay between the announcement on two meters and the pouncing by the club participants because they were elsewhere making contacts. This delay generally gave us the time to pounce. Today, with the prospects of a new multiplier so late in the contest, there was no delay.

Alexandra took the mic and gave her call, she was not alone, by this time many of Frankford's finest were calling. Bedlam personified! The VP was not impressed with the contest nor the Frankford operators. He said "only the young lady please, over!" This multiplier in the waning moments of the contest was all too important to Frankford's operators to honor his request. The VP returned again with a stern warning that he meant "Only the young lady" and he was not interested in the contest and if the contesters did not allow the young lady through then he was going QRT. Alexandra looked at me and said: who is he talking about ? I said it is YOU he wants! She gave her call --clear channel-- VP8BKK returned her call on 21.336 MHz at 19:53 Z on ssb: Bob's (Robert H Anderson) home call was G4RHA and he said he was there helping build the 'Mount Pleasant Airport' on East Falkland Island, South Atlantic.

Bob described his 'half pint station in the South Atlantic' which consisted of a 95 watt TS430 and a three element tri-band (10, 15, 20 meters) at 6 meters; 6,500 miles away. This QSO went on for many go arounds without any interference, describing life on one of the most desolate areas on the planet.

Bob's QSL says "Many thanks my love. It is you who made my day. Hope you like the enclosed. 73 & 88 Bob." Enclosed were photographs of the airport and his residence with a 3 element tri-band yagi on a tower. Bob also sent a copy of a newspaper "Falklands Focus" detailing the construction of the airport boasting 'a 2,590 meter main runway and a 1,500 meter secondary runway, including ATC tower, power stations, water supply and associated buildings.' Virtually all the personnel, equipment and materials had to be shipped 8,100 miles from the UK. Average temperature was 22 degrees F, with winds of 17 knots. 2,800 personnel worked for nearly three years to accomplish the task which was estimated to take five years. The project was completed under time and under budget.

This was one of the most fascinating QSOs for Alexandra, who always is repeating "Only the young lady, please!" Truly an Amateur Adventure.

73 Kevin K3NTD

Field Day 2016!

Page 10 and 11 photos courtesy of Dick Stewart, K3ITH



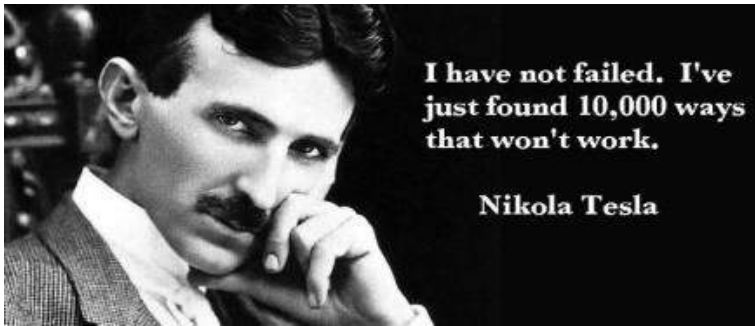


More Field Day Photos, from MARC's Facebook page:





Nikola Tesla, The Genius That Changed Our World



Nikola Tesla (1856-1943) made dozens of breakthroughs in the production, transmission and application of electric power. He invented the first alternating current (AC) motor and developed AC generation and transmission technology. Though he was famous and respected, he was never able to translate his copious inventions into long-term financial success—unlike his early employer and chief rival, Thomas Edison.

Tesla was born in 1856 in Croatia. His father was a priest and his mother managed the family's farm. As a child, his interest in electrical invention was spurred by his mother, who invented small household appliances in her spare time. In 1863 Tesla's brother Daniel was killed in an accident. The shock of the loss unsettled the 7-year-old Tesla, who reported seeing visions, the first signs of his lifelong mental illnesses.

Tesla studied math and physics at the Technical University of Graz and philosophy at the University of Prague. In 1882, while on a walk, he came up with the idea for a brushless AC motor, making the first sketches of its rotating electromagnets in the sand of the path. Later that year he moved to Paris and got a job repairing direct current (DC) power plants with the Continental Edison Company. Two years later he immigrated to the U.S.

Tesla arrived in New York in 1884 and was hired as an engineer at Thomas Edison's Manhattan headquarters. He worked there for a year, impressing Edison with his diligence and ingenuity. At one point Edison told Tesla he would pay \$50,000 for an improved design for his DC dynamos. After months of experimentation, Tesla presented a solution and asked for the money. Edison demurred, saying, "Tesla, you don't understand our American humor." Tesla quit soon after.

After an unsuccessful attempt to start his own Tesla Electric Light Company and a stint digging ditches for \$2 a day, Tesla found backers to support his research into alternating current. In 1887 and 1888 he was granted more than 30 patents for his inventions and invited to address the American Institute of Electrical Engineers on his work. His lecture caught the attention of George Westinghouse, the inventor who had launched the first AC power system near Boston and was Edison's major competitor in the "Battle of the Currents."

Westinghouse hired Tesla, licensed the patents for his AC motor and gave him his own lab. In 1889 Edison arranged for a convicted New York murderer to be put to death in an AC-powered electric chair—a stunt designed to show how dangerous the Westinghouse standard could be. Buoyed by Westinghouse's royalties, Tesla struck out on his own again. But Westinghouse was soon forced by his backers to renegotiate their contract, with Tesla relinquishing his royalty rights.

In the 1890's Tesla invented electric oscillators, meters, improved lights and the high-voltage transformer known as the Tesla coil. He also experimented with X-rays, gave short-range demonstrations of radio communication two years before Guglielmo Marconi and piloted a radio-controlled boat around a pool in Madison Square Garden. Together, Tesla and Westinghouse lit the 1891 World's Columbian Exposition in Chicago and partnered with General Electric to install AC generators at Niagara Falls, creating the first modern power station.

In 1895 Tesla's New York lab burned, destroying years' worth of notes and equipment. Tesla relocated to Colorado Springs for two years, returning to New York in 1900. He secured backing from financier J.P. Morgan and began building a global communications network centered on a giant tower at Wardenclyffe, on Long Island. But funds ran out and Morgan balked at Tesla's grandiose schemes.

Tesla lived his last decades in a New York hotel, working on new inventions even as his energy and mental health faded. His obsession with the number three and fastidious washing were dismissed as the eccentricities of genius. He spent his final years feeding—and, he claimed, communicating with—the city's pigeons. Tesla died in his room on January 7, 1943. Later that year the U.S. Supreme Court voided four of Marconi's key patents, belatedly acknowledging Tesla's innovations in radio. The AC system he championed and improved remains the global standard for power transmission.

Did You Know? During the 1890's, Mark Twain struck up a friendship with Tesla. Twain often visited him in his lab, where in 1894 Tesla photographed the great American writer in one of the first pictures ever lit by phosphorescent light.

Guglielmo Marconi was initially credited, and most believe him to be the inventor of radio to this day. However, the Supreme Court overturned Marconi's patent in 1943, when it was proven that Tesla invented the radio years previous to Marconi. Radio signals are just another frequency that needs a transmitter and receiver, which Tesla also demonstrated in 1893 during a presentation before The National Electric Light Association. In 1897 Tesla received two patents and in 1904, The U.S. Patent Office reversed its decision, awarding Marconi a patent for the invention of radio, possibly influenced by Marconi's financial backers in the States, who included Thomas Edison and Andrew Carnegie. This also allowed the U.S. government (among others) to avoid having to pay the royalties that were being claimed by Tesla.

The Mid Atlantic Amateur Radio Club Presents the

VALLEY FORGE HAMFEST

Saturday, July 9th, 2016

Kimberton Fire Co. Fairgrounds

Route 113 (Pike Springs Rd.) & Firehouse Lane • Kimberton / Phoenixville, Pa.

Admission: **Buyers 8 a.m. - \$6** **Sellers 7 a.m. - \$6**
Free admission for unlicensed spouse and children of licensed ham

*Tailgate space:

\$6 - Car width space/head in parking
No reserved tailgate spaces
**not including admission*

*Indoor Tables:

\$10 Each for 1-4 tables,
\$8 each for 5 or more
**not including admission*

Indoor table reservations - contact Mike Pilotti, KF3CD

Phone: 610-696-5040 • E-mail: kf3cd@arrl.net

Hamfest Information: hamfest-info@marc-radio.org or visit our website: www.marc-radio.org

✓ Rain or shine
Indoor & Outdoor Facilities!

✓ VE Tests at 10 am!
Register by contacting Dick
Stewart at k3ith@arrl.net

✓ Free QSL Card Checking for
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