Short
CIRCuits

February
2018

SERVING CENTRAL ILLINOIS AMATEUR RADIO SINCE 1921

IN THIS ISSUE

From The President

by Jim Baker WB9EDL

Happy New Year

Mother Nature has reminded us that she is still in control. The brutal cold and snow kept any outside work non-existent. We had to have fun in the warm confines of our radio shack.

I would like to thank Duane Benjamin KC9PIM for his service to the C.I.R.C. as our elected secretary. He has resigned his position due to health reasons. We all wish him well. Mike Sallee KC9FWL will fill in for our January meeting. The club will be looking for an individual to take secretary position for the remaining term. A special election will be conducted at an upcoming meeting to fill this position. Duane and I will be working on language to address succession of an elected official. This will be added to our club by-laws.

Operating news:

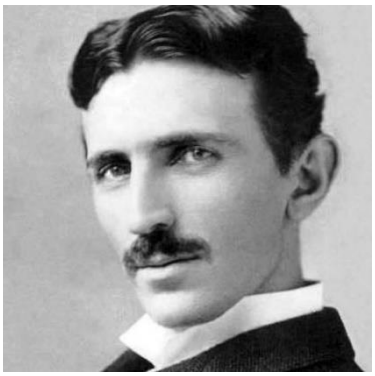
Gary Huber AB9M will present a program on FT-8 operating mode at our January 24, 2018 meeting. There has been increasing interest with this mode.

Craig Thompson K9CT will present a program about the 3Y0Z Bouvet Island DXpedition at our March 24, 2018 meeting . I hope we all can work the group there.

Collinsville Hamfest Saturday January 27, 2018.

Program slots are still open for February, April and May.

73,
Jim Baker WB9EDL



An Extraordinary Life
The life of Nikola Telsa

Nikola Tesla

Submitted by Mike Sallee KC9FWL

The Extraordinary Life of Nikola Tesla
The eccentric inventor and modern Prometheus died 75 years ago, after a rags-to-riches to rags life

By **Richard Gunderman, The Conversation**
SMITHSONIAN.COM
JANUARY 5, 2018 12:27PM

Match the following figures – Albert Einstein, Thomas Edison, Guglielmo Marconi, Alfred Nobel and Nikola Tesla – with these biographical facts:

- Spoke eight languages
- Produced the first motor that ran on AC current
- Developed the underlying technology for wireless communication over long distances
- Held approximately 300 patents
- Claimed to have developed a "superweapon" that would end all war

The match for each, of course, is Tesla. Surprised? Most people have heard his name, but few know much about his place in modern science and technology.

The 75th anniversary of Tesla's death on Jan. 7 provides a timely opportunity to review the life of a man who came from nowhere yet became world famous; claimed to be devoted solely to discovery but relished the role of a showman; attracted the attention of many women but never married; and generated ideas that transformed daily life and created multiple fortunes but died nearly penniless.

Early years

Tesla was born in Serbia on a summer night in 1856, during what he claimed was a lightning storm – which led the midwife to say, "He will be a child of the storm," and his mother to counter prophetically, "No, of the light." As a student, Tesla displayed such remarkable abilities to calculate mathematical problems that teachers accused him of cheating. During his teen years, he fell seriously ill, recovering once his father abandoned his demand that Nikola become a priest and agreed he could attend engineering school instead.

Although an outstanding student, Tesla eventually withdrew from polytechnic school and ended up working for the Continental Edison Company, where he focused on electrical lighting and motors. Wishing to meet Edison himself, Tesla immigrated to the U.S. in 1884, and he later claimed he was offered the sum of US$50,000 if he could solve a series of engineering problems Edison's company faced. Having achieved the feat, Tesla said he was then told that the offer had just been a joke, and he left the company after six months.

Tesla then developed a relationship with two businessmen that led to the founding of Tesla Electric Light and Manufacturing. He filed a number of electrical patents, which he assigned to the company. When his partners decided that they wanted to focus strictly on supplying electricity, they took the company's intellectual property and founded another firm, leaving Tesla with nothing.

Tesla reported that he then worked as a ditch digger for $2 a day, tortured by the sense that his great talent and education were going to waste.

Success as an inventor

In 1887, Tesla met two investors who agreed to back the formation of the Tesla Electric Company. He set up a laboratory in Manhattan, where he developed the alternating current induction motor, which solved a number of technical problems that had bedeviled other designs. When Tesla demonstrated his device at an engineering meeting, the Westinghouse Company made arrangements to license the technology, providing an upfront payment and royalties on each horsepower generated.

The so-called "War of the Currents" was raging in the late 1880s. Thomas Edison promoted direct current, asserting that it was safer than AC. George Westinghouse backed AC, since it could transmit power over long distances. Because the two were undercutting each other's prices, Westinghouse lacked capital. He explained the difficulty and asked Tesla to sell his patents to him for a single lump sum, to which Tesla agreed, forgoing what would have been a vast fortune had he held on to them.

With the World's Columbian Exposition of 1893 looming in Chicago, Westinghouse asked Tesla to help supply power; they'd have a huge platform for demonstrating the merits of AC. Tesla helped the fair illuminate more light bulbs than could be found in the entire city of Chicago, and wowed audiences with a variety of wonders, including an electric light that required no wires. Later Tesla also helped Westinghouse win a contract to generate electrical power at Niagara Falls, helping to build the first large-scale AC power plant in the world.

Challenges along the way

Tesla encountered many obstacles. In 1895, his Manhattan laboratory was devastated by a fire, which destroyed his notes and prototypes. At Madison Square Garden in 1898, he demonstrated wireless control of a boat, a stunt that many branded a hoax. Soon after he turned his attention to the wireless transmission of electric power. He believed that his system could not only distribute electricity around the globe but also provide for worldwide wireless communication.

Seeking to test his ideas, Tesla built a laboratory in Colorado Springs. There he once drew so much power that he caused a regional power outage. He also detected signals that he claimed emanated from an extraterrestrial source. In 1901 Tesla persuaded J.P. Morgan to invest in the construction of a tower on Long Island that he believed would vindicate his plan to electrify the world. Yet Tesla's dream did not materialize, and Morgan soon withdrew funding.

In 1909, Marconi received the Nobel Prize for the development of radio. In 1915, Tesla unsuccessfully sued Marconi, claiming infringement on his patents. That same year, it was rumored that Edison and Tesla would share the Nobel Prize, but it didn't happen. Unsubstantiated speculation suggested their mutual animosity was the cause. However, Tesla did receive numerous honors and awards over his life, including, ironically, the American Institute of Electrical Engineers Edison Medal.

A singular man

Tesla was a remarkable person. He said that he had a photographic memory, which helped him memorize whole books and speak eight languages. He also claimed that many of his best ideas came to him in a flash, and that he saw detailed pictures of many of his inventions in his mind before he ever set about constructing prototypes. As a result, he didn't initially prepare drawings and plans for many of his devices.

The 6-foot-2-inch Tesla cut a dashing figure and was popular with women, though he never married, claiming that his celibacy played an important role in his creativity. Perhaps because of his nearly fatal illness as a teenager, he feared germs and practiced very strict hygiene, likely a barrier to the development of interpersonal relationships. He also exhibited unusual phobias, such as an aversion to pearls, which led him to refuse to speak to any woman wearing them.

Tesla held that his greatest ideas came to him in solitude. Yet he was no hermit, socializing with many of the most famous people of his day at elegant dinner parties he hosted. Mark Twain frequented his laboratory and promoted some of his inventions. Tesla enjoyed a reputation as not only a great engineer and inventor but also a philosopher, poet and connoisseur. On his 75th birthday he received a congratulatory letter from Einstein and was featured on the cover of Time magazine.

Tesla's last years

In the popular imagination, Tesla played the part of a mad scientist. He claimed that he had developed a motor that ran on cosmic rays; that he was working on a new non-Einsteinian physics that would supply a new form of energy; that he had discovered a new technique for photographing thoughts; and that he had developed a new ray, alternately labeled the death ray and the peace ray, with vastly greater military potential than Nobel's munitions.

His money long gone, Tesla spent his later years moving from place to place, leaving behind unpaid bills. Eventually, he settled in at a New York hotel, where his rent was paid by Westinghouse. Always living alone, he frequented the local park, where he was regularly seen feeding and tending to the pigeons, with which he claimed to share a special affinity. On the morning of Jan. 7, 1943, he was found dead in his room by a hotel maid at age 86.

Today the name Tesla is still very much in circulation. The airport in Belgrade bears his name, as does the world's best-known electric car, and the magnetic field strength of MRI scanners is measured in Teslas. Tesla was a real-life

Prometheus: the mythical Greek titan who raided heaven to bring fire to mankind, yet in punishment was chained to a rock where each day an eagle ate his liver. Tesla scaled great heights to bring lightning down to earth, yet his rare cast of mind and uncommon habits eventually led to his downfall, leaving him nearly penniless and alone.

This article was originally published on The Conversation.

Richard Gunderman, Chancellor's Professor of Medicine, Liberal Arts, and Philanthropy, Indiana University

ARTICLES AND EVENTS

We need your input, please send any articles, links, interests or upcoming events you want the club to know about to Jeff Lovell KC9QQM@gmail.com

VINTAGE ELECTRONIC KIT FROM MASA

FAST FACTS

439

Times I ask for input for the newsletter, hi hi

170,000

Current members of the ARRL

FOR MORE INFORMATION

Have an upcoming event that the club might be interested in attending or supporting?

CONTACT JIM BAKER WB9EDL
Or bring it up at the next club meeting

Jeff KC9QQM radio astronomy dish

AREA EXAM DATES

Following is the schedule for W5YI-VEC Amateur Radio exams for the year 2017. At the Community Room of the Bloomington Public Library located at the intersection of E. Olive St. and S. East ST. Entrance off of S. East St.

Setup is from Noon to 1:00 normally. Exams begin at 1:00 P.M.

Please bring two forms of identification. You must have a Social Security Number. We cannot administer a test without your SSN. You will need a copy of your Current license plus any CSCE you want to apply.

2018 dates;

Jan 27 9-11am

3/24 1-3pm

5/26 1-3pm

7/11 tba

11/10 tba

Exams' in Morton are held at the Morton Public Library, 315 West Pershing at 12:00 Noon the third Saturday of even numbered months and. Sep 21 (Superfest),

AREA NETS

Mon thru Sat 9:00 A.M. CT 14.2475 (HF)
Displaced Peorians
Tuesday 9:00 P.M. 147.255 (023 DCS)
Woodford County
Tuesday 7:15 P.M. 146.910
Tazwell County ESDA Net
Tuesday 8:30 P.M. 28.450
CIRC Open 10 meter Net
Tuesday 9:00 P.M. 146.940 (103.5PL)
CIRC Open Net
Wednesday 9:00 P.M. 147.060
Open Net Has Newsline
Wednesday 9:00 P.M. 442.250 103.5 PL
ARES Open Net
Varies 147.100 103.5 PL
Sometimes Trader's Net follows ARES Net held on 442.250
Thursday 8:00 P.M. 28.450
Vertical polarization is encouraged but not required
Thursday 9:00 P.M. 146.760 (162.2 PL)
Open Net with Newsline
Thursday 9:00 P.M. 146.850 (103.5 PL)
Open Net Peoria
Sunday 08:15 A.M. 1.915
Open 160 meter AM net
Sunday 7:00 P.M. 146.985 Clinton ARC net
Sunday 8:30 P.M 147.075 156.7 PL
Sunday 8:30 P.M. 146.730 123.0 PL Open Net

Regular Calendar of Events

Daily Coffee Klatch Monday thru Friday 9:00 a.m. at Dairy Queen Veterans at Cub's XYL's Join the OM's Monday and Friday

Weekly 10 Meter Net
Every Tuesday evening at 28.450 MHz- at 8:30 p.m.

Weekly 2 Meter Net
Every Tuesday evening on the 146.940- repeater at 9:00 p.m.

Weekly 6 Meter Net
Every Thursday evening at 50.135 MHz at 7:00 P.M.

Weekly 160 Meter AM Net
Every Sunday morning at 1.915 MHz at 8:15 A.M.

CIRC Meeting
Fourth Wednesdays of the month at 7:00 p.m. at the Red Cross building in Bloomington (Just north of the airport)

CENTRAL ILLINOIS RADIO CLUB
P.O. BOX 993 BLOOMINGTON, IL 61702-0993

WEB PAGE
HTTP://WWW.QSL.NET/W9AML/

The CIRC is a not-for-profit ARRL special service club whose purpose is to advance the service of Amateur Radio. Located in Central Illinois, the CIRC and its members welcome all to use the 146.94 repeater and to attend club meetings.

Submissions for the newsletter should be received by the 15th of the month and may be emailed to:
Jeff Lovell
e-mail kc9qqm@gmail.com

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