

The Confession of a Ham-a-holic

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The key to a successful Athenaeum paper is the writer's ability to elicit certain responses from his audience. In brief they are to make 'em laugh, make 'em cry or make 'em feel nostalgic, literary or scientific. A typical paper might be entitled "An Edgar Cayce prediction fulfilled – The Night Riders reincarnated as the Little Green me of Kelly". Historical treatises concerning revered people, places or events in Christian County are popular fare and original masterpieces of poetry or prose have surfaced from time to time. Last year's open meeting presentations featured two gentlemen of the cloth and were well received and especially after it was discovered that both writers had spent many hours in researching the data. It is with some hesitancy that I depart from the great and hallowed traditions of the past by making my paper a public confession of guilt, hoping somehow to gain your sympathy and understanding if not approval.

All of us have hidden areas in our lives which we are reluctant to expose to public scrutiny for fear of opprobrium, contempt or downright rejection. Therefore I must confess to being a Ham-a-holic. And just what is a Ham-a-holic, you might ask? Perhaps a petty thief who pilfers smokehouses to satisfy an inordinate craving for a two year old Kentucky smoked ham? No, my friend, something even worse than that- I am an aficionado of the Amateur Radio fraternity who was bitten by the bug. Like our other addicted brothers the drug junkies, Frisbee freaks and fishermen we are members of a vast underground sub-culture with our own texting language, customs, rituals and lore. Thousands of otherwise normal individuals are afflicted with this dread incurable disease such as farmers, housewives, druggists, school teachers, airline pilots, coal miners, U.S. Senators and even Middle East potentates have drifted into this sad

condition, often due to the influence of a friend. Perhaps excerpts from a Sunday February 24, 1980 Dear Abby Column in the Courier-Journal will best serve to illustrate the full blown syndrome.

Dear Abby: A second opinion please, or a third, fourth or fifth. For the past eight years George (my husband) has shut himself up in a room with his Ham Radio from 7 am until 11 pm. He eats in there, too, never with us. Of course all the kids are gone except the 13 year old whom George talks to yell at. He kicked one of our daughters out at age 16. Do you suppose he will ever change? We have no friends, never go anywhere. No social life at all. George has a Radio in his pick-up so if you ride with him, all you hear is static from the radio and "shut up!" from him. We're in our late forties. I have thought of terminating our marriage. My thirteen year old says you'll advise us right. Please hurry. "Had it in D.C.

Abby's answer: If this has been going on for eight years I doubt anything you do will change George.

My own fascination with Ham Radio lies in its cross-connections with many diverse fields. Electronics, gadgetry, Geography, conversation, Meteorology, Stamp collecting, kit building, travel and the call of faraway places plus a little friendly competition are all intertwined in a hobby and discipline that is most engrossing. Most Hams get hooked because another ham is 110% enthusiastic. The subject might bubble up in the course of casual conversation and if the listener shows the slightest interest, an invitation to come over and see who is on the band will quickly follow. Once at his front door you might be greeted by the wife, henceforth known as the XYL, who casts a resigned glance and shrugs her shoulders as she directs you to the Sanctum Sanctorum – the Ham Shack – where things happen. Electronic gear of variable vintage is stacked, stored and strewn around the room while on a desk sits a living, breathing pile of radio gear replete with switches, gauges, dials, lights and indicators occasionally emitting groans, screeches, and urgent runs of dots and dashes. Maps, graphs, licenses, certificate, and a collection

of QSL postcards are plastered on the wall often covered with a thin layer of dust undisturbed by a female touch for months. The genial host removes his earphones, greets you affably and returns to the field of action. After fiddling with the radio dials for a while, a more or less intelligible voice comes through the speaker calling CQ CQ CQ 40 meters KA9ABQ standing by for a call. Every licensed Ham of course has a call sign assigned by the FCC Licensing Bureau after passing an exam and must be used at the beginning and end of every contact. In the USA there are ten call areas and the Ninth call area includes stations in Illinois, Indiana and Wisconsin so the chances are KA9ABQ lives in area 9 – unless he moved after earning his first license. Our friend, whom we will call Elmer, clutches his mike and intones “KA9ABQ this is KA4GYU, Kilowatt Alpha Four Golf Yankee Uniform – do you copy Old Man? KA4GYU KA4ABQ back. Thanks for coming back to me. Your signal report is 5 9 Five and Nine in Bloomington, Indiana and the name here is Jack. So how copy? Fine business Jack and you are also 5 &9 tonight into Hopkinsville, KY. The handle here is Bill. The temperature in Kentucky tonight is 55 degrees with clear skies. A signal report of five means good readability and quality, and nine refers to degree of loudness or strength. If the contact is made in CW – Morse code – there is an additional character T for tone . Jack, my rig is a Tentec Triton IV and putting out 75 watts into a vertical antenna. Hey Jack, my friend Bob is here with me in the shack. Wanta say Hi to him? This leads to a sales pitch of course and before the evening is over Bob has a dream of twirling the dials and gauges himself and talking with people all over the world. He departs with a dreamy expression, two manuals and probably an invitation to come back and learn more.

The first step in Ham Radio is to study for the Novice License and many local Ham Clubs offer classes. The exam is in two parts, a Morse code test requiring the ability to send and receive 5 words per minute, and a written portion covering FCC regulations, basic radio theory, operating procedures, circuitry and components. A station and operating license and CallSign, will arrive in about 3 weeks after successful completion and allow limited privileges in certain portion of the Amateur portions of the band. I was

fortunate to have studied CW for a part of my First Class Boy Scout test 35 years previously and most of it came back. Because brevity is important in code work, a lot of abbreviations have evolved down through the years known as Q signals. A QSO is a contact, QTH your location, QSL means to confirm and CQ is a call for anything other station listening to respond. After having received your license, basic equipment - a transceiver, telegraphy key and antenna will get the job done and need not be expensive. My first radio, or Rig, was a fifth-hand Heathkit HW 100 and a wire antenna strung up between trees in the yard. I was able to make contacts with Hams in such exotic places as Sedro Wooley, WA., Toole, UT, the Bronx, NY and other locales. Also helpful is an Elmer, another amateur who will help you get started and is a great tradition of Ham Radio. Some of us even need two Elmers and my friends Bob Boyd and Tom Westerfield both contributed to my education, addiction and delinquency.

The first QSO as a Novice can be a nerve wracking experience like the first time you try to parallel park the family car. Five words sounds like a leisurely pace but when you're not exactly sure what to expect coming at you becomes harrowing. To initiate a contact, you first tune up your rig and listen for a station calling CQ CQ CQ slowly, then answer by repeating his call and then yours. It sounds rather rhythmic in code. Information such as signal strength, operator's name, location, weather, transceiver and antenna are exchanged. To end the contact 73's - best wishes, and maybe CUL -see you later - are sent along with both call signs. Details of each contact are entered in a Log book and if desired, a QSL card confirming the contact, may be sent.

Call signs indicate the country, area, and in the US give an idea of the operators license class. Novices have a two letter prefix, a number and a three letter suffix like my KA4GYU while the Extra class calls are one-by-two or two-by-one. My friend and model in Florida is Giff W4HZ, who has been on the air since the 1920's. There are five license classes - Novice, Technician, General, Advanced and Extra with progressive privileges and passing a stiffer theory test to obtain. The Morse code requirement goes up to 13

wpm for the General class and to 20 wpm for the Extra, and with voice privileges also in wider ranges for each step.

There are a lot of challenges involved in making contacts with stations in the US and through out the world. The ARRL and other groups have contests and offer Award certificates for accomplishments like DXCC, contacting 100 foreign countries, with cards to confirm. The first award most Hams strive for the WAS, Working all States. California with 40,000 Hams is easy but Wyoming with only 500 is more of a challenge. DXing, or contacting foreign stations is another fascinating facet of Ham Radio. There are approximately 345 countries, islands, territories or political entities with separate call signs to be contacted and a real thrill to talk with a Ham in Germany, New Zealand, Kuwait and carry on a conversation. A handy world atlas to pinpoint your new foreign makes geography come alive and I have a 4 x 6 ft. National Geographic World Map on the wall to locate obscure islands.

In 1902, Stubblefield predicted "The system can be developed until messages by voice can be sent and heard, to Europe and all over the world. There is nothing to stop it. The world is its limit." Scientists, speculators and reporters came to Murray from all over the country but something went wrong and there were stories of trickery, connivance and dirty deals by Eastern investors. Disillusionment and embitterment followed and Nathan B. Stubblefield withdrew from the world and became a recluse until his death in 1928. A monument celebrating his accomplishment was erected on the Murray State campus in 1930, and in 1948 Murray's first AM Radio station identified itself "This is WNBS, Murray, Kentucky, the birthplace of radio."

Unfortunately, Stubblefield was not in the main stream of Radio communications development. In 1864 James Clark Maxwell discovered that electromagnetic waves could be propagated in space after originating in wires and traveling at the speed of light. Faraday and Young had earlier deduced the connection between light and electricity and found that light waves represent transverse vibrations of energy. Von

Hemholtz, professor of Physics at Berlin and inventor of the Ophthalmoscope, was well known for his work on the resonance of sound waves and his brilliant pupil Henrich Hertz developed a spark-gap generator with a detector loupe and demonstrated energy transfer. Hughes, the American, Brauly the Frenchman, Lodge the Englishman and Popov the Russian all made significant contributions to the field. Guglielmo Marconi, the Irish-Italian was more of an entrepreneur than a laboratory scientist and sensed the usefulness of electrical transmission without the necessity of wires or cables. Using various adaptations, he was able to transmit code up to a mile away in 1895, across the English channel in 1899 and bridge the Atlantic in 1901. Awarded the Nobel Peace Prize in 1908, he was given world-wide acclaim. Early U.S. wireless pioneers included R. A. Fessenden who invented the rotary spark gap and radio broadcasting in 1900, and aired phonographic music in 1906. Fleming discovered that a vacuum tube could be used to detect radio signals and Lee DeForest developed the Triode tube capable of generating RF and the concept of feedback circuits. Annesley came up with the superheterodyne circuit, Conrad with FM, and in 1948 three Bell Laboratory scientists fabricated the first transistors. SSB followed along with FETs, Mosfets and increasing sub-minaturization of components, many as fallouts from the Space program. Comsat communication satellites and moon-bounce signals have all entered the scene and who knows what other developments will emerge in coming decades? (Ed. Note: This was in 1980 before Cell Phones, Facebook, Tablets, etc.)

And where did the Hams fit in? Right behind Marconi, amateurs were attempting to duplicate his feat. At first people used wireless telegraphy for private communication at short distances, up to 20 miles. For longer range, stations banded together to relay the messages and a network developed . In 1914 the American Radio Relay League was founded by Hiram Percy Maxim and others to coordinate these efforts and has evolved into a 250,000 member organization, voluntary and non-governmental, which probably explains its success. It is one of the largest amateur organizations in the world dedicated to a Hobby and along with its sister group, the

IARU it has probably done more to foster good will among people of different nations than any other group. Compare the International Olympic committee or UN for example.

By 1912 there were so many governmental, commercial and amateur stations on the air that the first Communication laws were passed assigning frequencies to the various groups and predictably the "Non-useful" bands above 1500 Kilocycles were given to Hams. World War 1 terminated amateur activity but in 1919 Maxim and the ARRL were able to re-open amateur service. In 1921 and 1922 the ARRL conducted tests and experimented with longer range communication. In 1923 U.S. and French Hams cooperated with many two-way contacts across the Atlantic. The Short Wave Era had begun with Hams opening up the range above 1500 Kc range, attracting commercial interest and resulted in International conferences to allot frequencies. Amateurs were able to retain several frequencies for exclusive use or at worse, to share. The Federal Radio Commission in 1927, and later the Federal Communications Commission in 1934 were formed to license commercial and amateur broadcasting, assign frequencies, designate call signs, control equipment quality and power. Section 97 of the FCC Act of 1934 is applicable to amateur activity and is amended from time to time by ARS three-member Commission. World War II also caused a cessation of Ham activity but this time Hams provided a large reservoir of trained personnel ready, willing and able to serve their country in time of war providing communications in the armed services. Since World War II the scientific explosion has brought in a whole new era with many new modes and areas such as FM, SSB, Slow Scan TV, Moon bounce, Amateur radio satellites, UHF and VHF Repeaters, etc. Interest in CB Radio has attracted a new generation of Hams eager to communicate with more power, legally and a wider range of frequencies than a narrow band on 11 Meters.

On the local scene, there was interest in Radio in the early 1930's. Walker Wood and his cousin McFarland Wood had spark gap rigs and others did also. One of the first licensed

Hams in Hopkinsville was William Roper who lived in the 14th and Bryan Street neighborhood. His first call was 9COH and his first rig was a spark gap transmitter with a rather wide frequency band. The City electrical system at that time was developed to provide power for electric lights but not stoves, air conditioners, refrigerators and other appliances with a single transformer for three or four square blocks so when he went on the air, all the lights in the neighborhood dimmed, arousing the citizenry and causing him to operate only in the wee small hours of the morning. Radio-minded young people gathered at his home to listen on a crystal receiver to early stations like KDKA Pittsburg, and WWJ Detroit. Apparently, Mr. Roper was successful in making many foreign contacts and received QSL cards from all over the world. Mrs. Madeline Brown Wood recalls the evening her father, Dr. F.M. Brown awakened her to her music being played on KDKA. Another early Ham was Jack Keeney, now nearing retirement in Owensboro who also served as a Lay Minister. Jack lived on Canton Street and like most of the early operators made most of his own equipment. Shortly after their marriage, his new bride returned home to find Jack sending chimes over the Radio - chimes which came from her new Fosteria crystal! We understand that the Reverend afterward confined his activity to voice and code communication, less melodious perhaps, but much more conducive to marital harmony and domestic tranquility. When WHOP was scheduled to go on the air for the first time, a defective tube was discovered in the transmitter. Dutch Lackey called him in panic, asking for help, and fortunately Jack had a replacement on hand which saved the day. First licensed in 1929 as W9ZUZ, his call was changed to W4ZUZ when the call areas were redesignated. In those days, Hams could transmit just over the top of the commercial bands at 1600 KHz and the general public could listen in. Many people did and Hams received fan mail, birthday cards, knitted scarves and other articles of appreciation. One group of locals called themselves The Hard Luck Club and met on schedule at 1600 Kz. They even held a Hamvention in Hopkinsville attended by 40 couples. In the early 30's, Jack received permission from the Kentucky State Parks Department and operated from the top of the Jefferson Davis

Monument in Fairview. He was later the first if not last Ham to claim LaFayette as his home QTH.

One of the best known and widely respected Hams in town died recently. Sam Koerner moved to Hopkinsville in 1939 and operated a Radio and later TV shop. Although not licensed until 1958, he was a freal encouragement to younger mencoming on and sadrved as a consjltant, father-confessor, adviser and friend. Along with Tom Westerfield he helped to found the Pennyrile Amateur Radio club, PARS, an affiliate of the ARRL, our national club.

Not only is Ham Radio an interesting hobby but it also offers valuable public service by providing communications in times of emergency when normal lines of have been disrupted. Hams have responded after hurricanes, floods earthquakes and other natural disaster in badly damaged areas. Tom Westerfield was statewide director of communications for the Kentucky Baptist Disaster Relief Program and converted a Bread Truck into a mobile Ham station which he drove to Mississippi after a Hurricane and helped to coordinate the relief efforts, providing the only link available. ARRL's RACES and ARES programs also provide the same service. MARS stations connect military families with their service members in places like Kuwait and Iraq while they are deployed and Tom also went to Haiti to help out. There is a special Net called The Halo Net where Missionaries in Central and South America can meet and go off frequency for a chat with their friends and families at home. I talked with Larry Baker several times when he was in Ecuador and Peru serving in the Andes.

Well folks, its time to go QRT - quit transmitting - and pull the plug. I have enjoyed our QSO tonight and hope to see you later on the band. To you men, 73 - best wishes - and to the ladies 88 - hugs and kisses. Station ATHENAEUM this is KA4GYU signing off and clear.