ARRL Requests Expanded HF Privileges for Technician Licensees

To all radio amateurs
SB QST ARL ARLB007

March 1, 2018

ARRL has asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The FCC has not yet invited public comment on the proposals, which stem from recommendations put forth by the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its Petition. "It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."

Specifically, ARRL proposes to provide Technician licensees, present and future, with phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz, plus RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters. The ARRL petition points out the explosion in popularity of various digital modes over the past 2 decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under the League's proposal.

ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills. Demographic and technological changes call for a "periodic rebalancing" between those two objectives, the League maintains.

"There has not been such a rebalancing in many years," ARRL said in its petition. "It is time to do that now." The FCC has not assessed entry-level operating privileges since 2005. The Entry-Level License Committee offered very specific data and survey-supported findings about growth in Amateur Radio and its place in the advanced technological demographic that includes individuals younger than 30. It received significant input from ARRL members via more than 8,000 survey responses.

"The Committee's analysis noted that today, Amateur Radio exists among many more modes of communication than it did half a century ago, or even 20 years ago," ARRL said in its petition.

Now numbering some 378,000, Technician licensees comprise more than half of the US Amateur Radio population. ARRL said that after 17 years of experience with the current Technician license as the gateway to Amateur Radio, it's urgent to make it more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education "that inescapably accompanies a healthy, growing Amateur Radio Service," ARRL asserted.
ARRL said its proposal is critical to developing improved operating skills, increasing emergency communication participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about 1% per year.

The Entry-Level License Committee determined that the current Technician class question pool already covers far more material than necessary for an entry-level exam to validate expanded privileges.

ARRL told the FCC that it would continue to refine examination preparation and training materials aimed at STEM topics, increase outreach and recruitment, work with Amateur Radio clubs, and encourage educational institutions to utilize Amateur Radio in STEM and other experiential learning programs.

"ARRL requests that the Commission become a partner in this effort to promote Amateur Radio as a public benefit by making the very nominal changes proposed herein in the Technician class license operating privileges," the petition concluded.

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**Amateur Radio To Conduct Real Science**

*by Hans van de Groenendaal, ZS6AKV features editor, EngineerIT*

US radio amateurs and scientist recently formed a new organisation called Ham Radio Science Citizen Investigation (HamSCI) with the aim of connecting professional ionospheric and atmospheric researchers with the worldwide amateur radio community. Members of the HamSCI have already carried out two studies, looking at Sporadic E communication and the effects of solar eclipses on propagation.

On 21 August 2017 the US experienced a total solar eclipse. HamSCI mobilised over 600 radio amateurs and a number of scientists from universities and research organisations to study the effects of solar eclipses on the ionosphere. The overwhelming information gathered is now being analysed and will soon be made available in various publications.

South Africa did some similar research but on a much smaller scale. During the solar eclipse on 4 December 2002, South African radio amateurs took part in an experiment conducted by Tony Voorveld who was working at the Department of Physics at the University of the Witwatersrand at the time. The objective was to show that solar eclipses do affect radio propagation. Radio amateurs were asked to tune to 1485 kHz, Radio Today – a low-powered AM station in Johannesburg.

Reports received indicated that under normal circumstances the station could not be heard during daylight hours. During the eclipse, as the moon was slowly moving in front of the sun, weak signals were monitored with signal strength slowly increasing and reaching the maximum level as the eclipse started to recede. The signal disappeared not long after the eclipse ended.

**Sporadic E**

HamSCI member Joe Dzekevich (K1YOW) has a special interest in operating on 6 Metres (50 MHz) during the northern hemisphere summer months when the 6 metre band opens and makes long-distance contacts possible. Of particular interest to him was sporadic E propagation. But this interest also caused him a lot of frustration as he noticed that sporadic E communication in Europe was nearly a daily possibility while this was not the case in the USA. This led Dzekevich to do research on why. He engaged other scientist members of HamSCI to collaborate with his research.

Talking to Dzekevich during a Skype conversation, he explained that he first had to research the mechanics of sporadic E to get a better understanding of how sporadic E clouds are formed.
Sporadic E layers are a phenomena of the ionospheric E-region which occurs between 90 and 120 km in altitude and consists of enhanced electron density as compared to the background ionisation created every day by the sun’s extreme ultraviolet rays. The E-layer virtually disappears at night as there is not enough solar radiation to sustain it.

Sporadic E layers appear mainly during daytime in mid-latitudes and mostly in the summer hemisphere. The layers have a typically vertical thickness of between 500 m to 5 km and a horizontal spread of 10 to 1000 km.

Dzekevich said that it quickly became clear that a prime cause of sporadic E is related to winds in the upper level neutral atmosphere. As can be seen from many rocket flights, neutral winds around 100 km in altitude can have strong shears or changes in horizontal direction. Meteoric dust coming from tiny kilograms-sized or smaller micro meteoroids burning up at around 100 km altitude provide raw material, mainly iron, magnesium and potassium (Fe+, Mg+ and K+) for the formation sporadic E layers.

Dzekevich and his fellow scientists found some other interesting factors that influence sporadic E. Some of Dzekevich’s findings include: Upper level low pressure systems with their strong possibility to affect high-level tidal winds shears via coupling to thunderstorms, hurricanes, strong fronts and lightning present a high degree of observational correlation to the appearance of mid-latitude sporadic E layers.

Low pressure systems that generate intense disruptions, including lightning and sprites could have extra potential to enhance the mid-latitude propagation up to 50 MHz.

A working hypothesis, requiring more research, is that sporadic E may be driven mostly by solar tidal wind shear in the E-layer ionisation field along with some form of horizontal Lorentz forcing from the Earth’s magnetic field component.

Dzekevich says it is clear that we do not yet completely understand the mechanism behind sporadic E. Radio amateurs make sporadic E contacts in polar and equatorial regions even if the literature says that it is unlikely, if not impossible. Perhaps in the polar regions it is directly affected by the solar wind.

South African radio amateurs are not new to sporadic E communication. Mike Bosch (ZS2FM) in Port Elizabeth – a prominent promoter of communication on the higher amateur frequency bands – says that sporadic E communication is something fascinating to experience. Unexpectedly, a faint fluttery beacon signal would appear and slowly increase in strength, and after a few minutes would reach a signal strength of S9 plus with little fading (QSB). An opening could last half an hour or longer, before rapid QSB returns and the signal starts to fade out.

On 4 January 2018 there was an unexpected sporadic E opening across South Africa. It started with a report from the Eastern Cape at 15h42 that a beacon was heard, followed by several reports from KwaZulu-Natal and Western Cape. At 17h53 Pieter Jacobs (V51PJ) in Rosh Pinah in Southern Namibia made contact with stations in Gauteng. At 18h49 signals started to fade rapidly.

During the excitement little scientific data was recorded. It would have provided an ideal opportunity to shed more light on lower latitude sporadic E communication. It may, however, be possible to retrieve historical weather and space weather data to achieve some understanding of what lead to the development of this large sporadic E cloud.

Dr. Philip Erickson (W1PJE), assistant director at the MIT Haystack Radio telescope and Millstone Ionospheric Radars, said there are many opportunities for radio amateurs to observe and experiment and to become active citizen scientists in the area of radio propagation research. “There is a lack of information on how the ionosphere reacts in the Southern Hemisphere and particular in African regions. We believe it is very different and encourage radio amateurs on the African continent to become active citizen scientists. As South Africa has the largest concentration of radio amateurs in Africa, it would be good place to start.”
To heed Dr. Erickson’s call, South African scientist and interested radio amateurs should get talking. Perhaps a South African HamSCI group can be developed. There are already two South African Radio League projects that would benefit from this interaction: 5 MHz propagation research and RF noise level measurements.

http://www.ee.co.za/article/amateur-radio-conduct-real-science.html

New Net on 224.84, Tuesdays at 7:30 on WAØVRS

NEW! 220 Net. The new 220 Net started on January 9th, Tuesday at 7:30pm, on the 224.84 repeater in Topeka. Minus offset (i.e. 223.24 in) and 88.5 Hz tone. Todd (KØKAN), said the repeater should cover Shawnee County fairly well, but the antenna isn't very high up so it might not be heard quite as well outside Shawnee County. You're still welcome to come aboard. Again, this net is on Tuesdays at 7:30pm, on 224.84 MHz.

S.A.T.E.R.N.

Salvation Army Team Emergency Radio Network

Latest W MO/KS Newsletter

http://ksarrl.org/satern

Kansas Traffic Net Schedule

<table>
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<th>Days</th>
<th>Time</th>
<th>Mgr</th>
<th>Freq</th>
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<td>KB0PPQ</td>
<td>3920 KHz</td>
<td>Kansas Phone Net</td>
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<tr>
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<td>7:00AM</td>
<td>WB0YWZ</td>
<td>3920 KHz</td>
<td>Kansas AM Weather Net</td>
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<tr>
<td>Sat, Sun</td>
<td>8:00AM</td>
<td>KB0PPQ</td>
<td>3920 KHz</td>
<td>Kansas Phone Net</td>
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<td>KE0DL</td>
<td>7253.5 KHz</td>
<td>Central States Traffic Net</td>
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<td>WB0YWZ</td>
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<td>Kansas Weather Net</td>
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The ARRL Midwest Division August 2017 Newsletter is now available on the Division's Web page. Here's the direct link:


This link always takes you to the current month's newsletter. If this month's newsletter doesn't open, try refreshing the page or clearing your browser's cache, in case your browser is loading a copy of a previous newsletter. Previous newsletters are available at: http://www.arrlmidwest.org/newsletter.html

Highlights this month are:

- Introduction to the 2018 Midwest Division Convention
- Missouri Summits on the Air (SOTA) Celebrates 5th Anniversary
- Amateur Radio growth
- The Importance of Being ?Elmer?
- W0QSL Bureau
- VHF Weak Signal Work in the Midwest
- The Nebraska State Convention
- Midwest Division ARRL Hamfests & Conventions
- Midwest Division Special Event Stations

Thanks and 73's,
ARRL Midwest Division Director:
Roderick K Blocksome, KØDAS
k0das@arrl.org
Supporting Our Veterans - Honorably Discharged

S*M*A*R*T - Special Military Active Retired Travel Club

KCONDG  Sherwin
or SARG;  EX-K102  1960 to 1987
or TOP, 1SG;  Army USAR, Retired 1951 to 1987  ---  final discharge 1994

God Bless those who have served this great country AMERICA
Proud Military Veteran

SEEING THE COUNTRY WE DEFEND

SHERWIN & DOROTHY STIELOW

Amateur Radio Emergency Service Transitioning to New Online Reporting System

The Amateur Radio Emergency Service (ARES) will phase out the traditional ARES report forms later this year in favor of an online system called ARES Connect, a volunteer management, communications, and reporting system. The new system will allow information to be logged by ARES members and managed through the Field Organization. The advent of ARES Connect is one of the key elements highlighted in "The Amateur Radio Emergency Service (ARES) 2017 Annual Report," released this week.

"ARES Connect is a volunteer management system that covers event signup, reporting, and roster management," ARRL Emergency Preparedness Manager Mike Corey, KI1U, said. "It does not change how ARES operates when serving a partner entity; it is simply a system that will make managing volunteers and events easier." Beta testing of ARES Connect will begin in March. ARES made changes to its report forms last year to make it easier to process information at ARRL Headquarters and to standardize the format for all forms. ARES Monthly Reports have been posted to the ARRL website, providing regular information on Amateur Radio public service communication activity, the report noted.

According to the 2017 report, ARES membership stands at 31,332, up by nearly 13% from 2016. The number of emergency operations events reported was up by 665 from the previous year, with 1,913 reported in 2017. The top three states in terms of ARES membership in 2017 were California (2,265), Texas (1,930), and Ohio (1,858).

Reported ARES events amounted to 51,673 in 2017 -- a 4% increase -- accounting for 718,930 volunteer hours at a calculated value of more than $17.3 million.
"There was a noticeable increase in reported activity during August through November," the *ARES 2017 Annual Report* said. "During this period there was Amateur Radio response activity for hurricanes Harvey, Irma, and Maria; wildfires in the western states, and the total solar eclipse that occurred on August 21."

According to the report, 26 states gained ARES members, while 13 lost members.

**ARES – Amateur Radio Emergency Service**

Complete list of ECs and a printable State ARES map [http://ksarrl.org/ares/](http://ksarrl.org/ares/)

http://ksarrl.org/ares/alphaks.php/  
http://ksarrl.org/distks.php

**AMATEUR RADIO EMERGENCY SERVICE**

**MONTHLY EC REPORT**

◆ **Zone 4A – Brian KCØBS**

Report not received.

◆ **Zone 6A, E & G – Rod KØEQH**

February 2018

Total Nets...............4  
Total Check Ins.....29

Stations participating: NØOMC, KDØTWO, NØKQX, NØOXQ, WBØQYA, ACØE, KØEQH, KGØVA

Rod  
KØEQH  
NCS

**2018 Storm Fury On the Plains Spotter Talks**

Meteorologists from the Wichita NWS coordinate with the Emergency Managers in the 26 county warning area to prepare storm spotters and weather enthusiasts for the upcoming storm season. The storm identification training schedule is posted and all in the Wichita NWS county coverage area are encouraged to attend.  [http://www.weather.gov/ict/spottertalks](http://www.weather.gov/ict/spottertalks)

**Weather 101 Lawrence Arts Center**

Weather 101  
March 28, 2018  
7 - 8:30 pm  
Free  
Lawrence Arts Center
Silent Keys

Joseph J. Harpenau, WBØZEQ

Joseph J. Harpenau, 91, of Topeka, formerly of Seneca, died February 27, 2018, a Via Christi Nursing Home in Wichita.

Joe was born on December 28, 1926 to Joseph C. and Philomena A. Cheray Harpenau in Long Beach, California.

In 1934, at the age of 8, Joe moved with his family to Kansas. He attended Sts. Peter & Paul Grade School and graduated from Sts. Peter & Paul High School in 1944.

He enlisted with the U. S. Navy and served in Korea during the Korean Conflict. He served on the USS912 ship; it carried tanks, jeeps and soldiers to the beaches. After being discharged Joe worked for the Kansas Department of Transportation (KDOT) for 38 years; retiring in 1988.

Joe was a passionate amateur radio operator for many years, going by the call letters WB?ZEQ, and was a member of the Kaw Valley Amateur Radio Club in Topeka. On April 16, 1986 he was allowed into the Wireless Room of the R. M.S. Queen Mary, at Long Beach, California as an amateur Radio Operator, a fact he was very proud of.

He was a member of the Earl W. Taylor Post #21 of the American Legion, the Seneca Memorial Post #7458 of the VFW, the Knights of Columbus Council 1769. On March 9, 2009 Joe stood on the Pyramid, the Official Center of the World, located in Felicity, California.

He is survived by his brother, Robert Harpenau of Wichita a sister Ruth Crawford of Wichita. Several nieces and nephews.

A rosary will be at 10:00 A. M. prior to the Mass of Christian Burial at 10:30 A. M. on Saturday, March 3, 2018 at Sts. Peter and Paul Catholic Church in Seneca.

The Burial will be in the church cemetery.

Memorials are for the Veterans Wall in Seneca and Sts. Peter and Paul Church.

http://www.lauerfuneralhome.com/obituaries/joseph_james_harpenau_2018_02_27

Travis Dean Whitt, KDØIXZ

On February 21, 2018, our community lost a very loved and unique soul. Travis Dean Whitt passed away from complications due to a lifetime battle with diabetes.

He was born on October 13th, 1968 to Richard Dean and Linda Joyce Whitt. His father passed away when Travis was 5 years old. He lived his entire life in North Topeka and in the neighborhood that he spent his childhood.

He graduated from Seaman High School in 1987, and began working for Joe Little Construction a few years after, up until his passing.

On May 30, 1992 he married Jennifer Wells. Together they raised two wonderful children, Samantha Cynn and Mathew Dean. As a family, they loved camping and going to the lake.

Fun times and friendships were formed with many people over the years because of their love of
these activities. Travis had an amazing and unique way to tell a joke, funny story, or an embellished tale that would leave people crying and laughing. Up until the end of his days with us, he kept calling, texting or e-mailing his friends and family with a joke or two. He would often call a person up, tell a joke then say a goodbye after a brief chuckle. He loved to laugh and make people laugh.

Growing up, Travis was loved by many, but His Aunt and Uncle, Joe and Betty Little, were special to him as much as he was to them. Joe and Travis shared a special bond and Joe treated him as a son moreover than just a nephew. We are sure that Joe was the first to greet him in the hereafter. Travis was not one to stand still. Throughout his life he was involved in many organizations. He is a member of the United States Coast Guard Auxiliary and recently was Flotilla Commander. He was in the Kaw Valley Amateur Club ham radio group. He was a member of Golden Rule Lodge #90 AF & AM, Topeka Scottish Rite Bodies, and Arab Shrine. And also was a hunter safety instructor, a boater safety educator, and was the den leader throughout his son's time in the Cub Scouts.

Although he was loved by many, he leaves behind his wife Jennifer, children Sammie and Mat, his mother Linda, a brother Kirby, a nephew Logan, his aunt Betty, several cousins he grew up with that were especially as close as brothers and a sister, Dave Little, Rick Little, Ron Little, Alan Taylor, and Bob and Denise Meyer, and step-father Greg Crockett.

As much as Travis loved to joke, laugh, and tell stories we hope you remember well of him and it brings you a smile thinking of that time.

Funeral services will be at 10:00 AM, Monday, February 26, 2018, at Penwell-Gabel Parker-Price Chapel, 245 NW Independence Avenue, Topeka. Private committal services will be in Rochester Cemetery, 1200 NW Menninger Road, Topeka.

Travis will lie in state after 3:00 PM, Sunday, at the funeral chapel where the family will receive friends from 6:00 to 7:30 PM.

Memorial contributions may be made to the Juvenile Diabetes Foundation, 215 West Pershing Road, Suite 300, Kansas City, MO 64108

To leave a special message for the family online, visit www.PenwellGabelTopeka.com.

http://www.penwellgabeltopeka.com/Obituary/154506/Travis-Whitt/Topeka-Kansas

William “Willy” Shockley, KBØWDW

William (Willy) Martin Shockley, age 54, Lawrence, KS, died on February 12th, 2018, at home surrounded by family. Willy was born March 3, 1963, the son of Johnson and Nancy Shockley, and grew up in Lawrence with his brother, Randy Shockley. He graduated from Lawrence High School in 1981. Willy worked at Hallmark for almost 30 years. He was a volunteer for the Lecompton Fire Department for 14 years, the last 6 years as Fire Chief. Willy's busy life was filled with many interests, including Ham Radio, the demolition derby car circuit, farming, tractor pulls, and working with Douglas County Emergency Management.

Willy was a devoted husband and father who will be remembered for his helpfulness, dedication, and sense of humor. He was deeply committed to serving his community. Friends and family acknowledged him as a "great man" and he will be missed dearly.

Willy is survived by his parents, Johnson and Nancy Shockley; his wife, Dianne Shockley; his brother, Randy Shockley; and his six daughters, Devin (David) Hardy, Rachel (Jeff) Hamm, Nicole (Albert) Neil, Casey (Branden Smith) Shockley, Morgan (Andrew Haney) Shockley-Haney, Darcey Summerville; one son, Casey Quigley; and grandchildren, Emberlynn Neil, Annaleigh Neil, Coralinne Neil, Josephine Hamm, Helaina Hamm, the Hardy twins, and Layla Quigley.

"Willy" Shockley, KBØWDW
A Celebration of his life will be held at Lecompton Fire Department, 415 Boone St., Lecompton, KS, on February 24th, 2018, from 3 to 6 pm. In lieu of flowers, please offer your condolences and consider donations to the Lecompton Fire/EMS as it was a major component of Willy's life and memory.


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**WØVFW VFW Post 3115 W5YI VE Tests**

WØVFW will host Amateur Radio TECHNICIAN classes in March 2018. This is to coincide with the start of the SKYWARN season. Please tell your interested friends.

Saturday March 17th (St. Patrick's Day) 9am to NOON- Lunch-1pm on- optional tutoring-meet & greet.
Saturday March 24th 9am to NOON- Lunch- 1pm on- optional tutoring -meet & greet.
Saturday March 31st (doors open 7:30am) VE Testing all classes- walk-in's welcome. ARRL $15 fee

Use the south patio entrance (privacy fence door) in the parking lot (avoids canteen area) Class Text book- W5YI Technician Study Manual Available at 1st class for $20 or Radio Shack in Derby.
The 1pm afternoon optional tutoring -meet & greet is open to all; to welcome everyone to the Amateur Radio family. THERE IS NO FEE FOR THE CLASSES. (only textbook and exam) Reservations requested.

VFW Post 3115 Amateur Radio Club, WØVFW
4801 West Douglas
Wichita, KANSAS 67209

Reservations or questions – w0vfw at yahoo dot com

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**Great Bend W5YI VE Tests**

Great Bend has been without an amateur radio club for some time. There is a W5YI CVE David Doonan, KIØNN, willing to do testing sessions on Saturdays.

Contact David at d.doonan at ruraltel dot net to set up a time for a Technician, General or Extra test session.

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**Kaw Valley (KVARC) CW Class**

CW Class (Hosted By: KVARC)

Doug Dunton, WDØDBS from the Kaw Valley (KVARC) Topeka, KS Club shared with me that they are going to try something new this year. They are going to try and put together a CW (Morse code) class for those who are interested. So far the schedule is set as follows:

Tue Apr 17th & 24th 2018 6:30 PM 8:30 PM CT Main - Marvin Auditorium 101A 18
Tue May 1st, 8th, 15th, 22nd, & 29th 2018 6:30 PM 8:30 PM CT Main - Marvin Auditorium 101A 18
Tue Jun 5, 2018 6:30 PM 8:30 PM CT Main - Marvin Auditorium 101A 18

If there are any questions on the CW class or wish to reserve a seat you are free to email Doug, WDØDBS.

provided by Richard Johnson, KØRCJ
This survey started out in 2017 as simple curiosity. While browsing the Amateur Radio subreddit I began to notice several users posting surveys for highly specific topics. I completed those surveys yet often wondered what the results were. I then decided to host my own survey, to collect the opinions from the community on topics that I cared about. I wanted to ensure I made the results widely available for anyone to consume for whatever reason.

The 2018 Survey link: https://goo.gl/1CxVSz (shortened from 126 characters) is here for those wishing to participate. Tom sent me the link, so we can give a heavy KC Metro, Kansas and Missouri sampling. If one-third of Larry's List participates, the count will exceed last years total! :-)

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**Benton Harbor Lunch Boxes**

Recently, perusing the adverts on QTH.COM, I espied a listing for a Heathkit HW-30 “Twoer”. I’d had one as a fairly new ham, and as is my custom, wanted to have another one to put on my “I used to have one of these” shelf. See, I’d finally gotten my license, while in the US Navy, so I always had access to really SUPER NICE rigs to use (I think the US Military, didn’t know to buy anything BUT a Collins S-line), but I wanted something of my own… that could fit into a standard barracks locker.

This particular HW-30 I got for $20 +shipping, arrived, and after ‘de dusting’ it, cleaning the chassis and testing the tubes (they were the ORIGINAL Heathkit ones!), plus treating the PTT switch, tuning cap shaft, and volume pot + switch (plus the individual female-pin contacts of the tube-sockets) with DeOxIT, I brought it to life… adjusting the appropriate slugs for the receiver, then sticking an “8 meg rock” (8mc xtal) in, and peaking the oscillator/tripler, tripler, then the doubling final, it worked just swell… surprising was the sensitivity; 1 microvolt at 146 mcs… pretty respectable for a 55-year old radio… so as I sat there listening to it’s comfortable hum (Hey, they ALL hummed), I thought I’d share something about how the 10er, 6er, and 2er came to be.

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Long ago in the land of Benton Harbor, Michigan, somebody was offered a bunch of aluminum boxes with plastic handles that looked exactly like lunch boxes. They had rounded corners and were offered at a great price, just slightly elevated from aluminum scrap, so Heathkit said “Yeah, sure… we’ll use ‘em for something”. That was about the time that the “CB Craze” began to really hit, so the first amateur product that used the “lunchbox” was a single-channel, crystal-controlled transmit frequency, but had a tunable super-regenerative receiver. It never really sold very well, which possibly explains that it’s one of THE most highly sought-after Heath KITS. Note: Many pieces of test equipment from those days, used the “lunchbox” cabinet, albeit in grey or silver.

Okay, so now you have a bunch of these boxes made, with all the holes punched, but you’re not sure what the heck to do with ‘em, so based on the fact that in the USA, and many other places, the only way to get on 6 meters and 2 meters was to convert some piece of WW-2 military gear (typically the SCR-522), or pop big bux on a PolyCom, Gonset “Gooney Bird” Communicator, Halliscratcher SR-34, Johnson “6n2”, or maybe even build it yourself.
So, the guys at Heath came up with three transceivers (a fairly new concept in ham radio), at a very reasonable price ($44.95), that would get you on 2 meters, 6 meters, or even 10 meters. They had a “modest” power input of 5 watts, which usually produced between 2 ½ to 3 watts OUTPUT... depending upon the phase of the moon, the planetary alignment, relative humidity, or other uncontrollable factors. They operated in A3 (amplitude modulated phone) mode, “could be” operated in CW (with considerable backwave), and were incredibly simple... turn the volume knob for a “click”, wait for warmup, tune the “dial” (144-148 mcs) for a station, and operate the TRUE push (or lift) to talk lever. It was either momentary OR could be locked in the ON position for LONGER rag-chew transmissions. Being a super-regenerative receiver meant you had to adjust the “regen” pot on the back, but a unique circuit eliminated the “swamping” that came with most receivers of this type... basically, set it once, and that was about all you had to do. Note: Amusingly, the regenerative receiver manages to TRANSMIT a rather nice carrier RIGHT ON the frequency you're listening to, so if there happens to be another person, with a separate rig, near you... all he'll hear is the “rush” of YOUR carrier... friends who’d be next to me back then in the mid-sixties, would make me turn my Twoer off, when we were at the same QTH. OH... and changing crystals was interesting – you had to remove the “box” part of the lunchbox to get TO the xtal socket, so all manner of modifications came of that – sockets on the front of the radio, cutouts behind the “license holder” on the side, rotary-switches to select from 5 or 6 crystals, and a host of others. Finding a Tener, Sixer, or Twoer that’s still stock (no extra holes) is pretty rare.

The microphone was one of those “El Cheapo” family tape-recorder jobbies, that just SAT there, or you could actually hold it in your hand – no PTT button, no clip, no nuthin... and it went into an MC-1 connector that typically got replaced with a ¼ “ phone jack, ’cause folks couldn’t find an MC-1 (even though they were common as heck, back then).

In those golden daze [sic], just about everything on 2m and 6m was on AM. Surplus FM gear (like Motorola and General Electric “suitcase” radios were being converted, and ran anywhere from 7.5 to 15 kHz deviation, and they were the foundation of what we use today.... That said, the Heathkit “Benton Harbor Lunch Boxes got thousands of hams on VHF with an affordable radio that opened up the bands to anybody with $45 bux. Also available from Heath, was the GP-11 power supply, which utilized a vibrator (a mechanical multi-vibrator for you new guys), a couple of diodes in a voltage-doubler circuit, and now you could run these radios MOBILE... which I did, from under the STEEL dashboard of a ’60 Chevy Impala.

So – these days when you turn on your single or dual-bander, and summarily take for granted, the fact that you can dial up an EXACT frequency.... On a digital readout, no less – replete with CTCSS, DCS, or coded squelch & maybe even a repeater or linked system , well, you can thank the folks at Heathkit/Daystrom, back there in 1960... for putting a little brown lunchbox on nearly every ham’s shelf... and opening the world above 29 mHz to EVERYBODY.

Dit dit

http://www.joelontheroad.com/harold-collins-and-his-wonderful-75a/

I couldn’t cut off the commentary, but the story is terrific. Interestingly, this fellow wrote a couple of stories on unique equipment, that appear in the ARRL book “Vintage Radio”. I have some gear from my Stepdad (Jim Carl - WØKI sk), and one piece is indeed a memory generator – it’s a Palomar 500 Power and SWR meter. Some years before Jim passed away, and when he could no longer get down to his beloved basement shop, he asked me to bring that meter up, that sat on a shelf. Upon bringing it “topside”, he said “why don’t you take this home with you?” I said “Sure, I like it”... then he added “I think you knew the former owner – remember Carl Bruns... KØGOZ?” I said that I sure did – it was at Carl’s house in Overland Park (about 72nd & Lowell) that I saw my FIRST ham radio station. I’d parked my bike on the sidewalk, and nervously rung the doorbell – when Carl’s wife answered, I
“Can I please see the ham who lives here?” She called Carl up from the basement and after my shaky introduction, and why I was there, he conducted me down to his shack... at the time, he had a Johnson Valiant transmitter and a Hallicrafters SX-99 receiver (I also remember a “Poly-Com 6 & 2”, but never saw it on.

Anyway, Carl lit off the gear and his wife brought down some cookies, and yeah... after my crystal sets and a 1-tube radio build (that sorta worked), I was hooked.... SO – to hold in my hands, a piece of gear that my ORIGINAL elmer, way back there in 1958, had owned... well, that was pretty cool. A footnote is that, on the bench at home, was a freshly repaired and restored Hallicrafters SX-99, and on the bench was the first of four Johnson Viking Valiant xmrts I redid... so that’s when it hit me – I had Carl's rig... just like all those years ago, there was an SX-99, a Valiant xmr, and a Palomar 500 SWR/power meter... and a copy of one of Carl’s QSL cards, from 1959... showing that exact station as what he'd used that day.

Dit dit.

Harold Collins and his wonderful 75A

Posted on April 17, 2011 by hro5ota1
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By Joel Thurtell

One crisp Saturday afternoon in October 2001 I chanced to see the red light blinking on my Radiofinder answering machine. In those days, in addition to writing for the Detroit Free Press, I ran a small mail-order business buying, repairing and selling old ham radios, and I called my one-man company Radiofinder. On this day, I was in a hurry — my family was headed for the Detroit Institute of Arts and they were waiting for me.

I couldn’t resist pushing the playback button.

A man’s voice said he’d heard I buy old radios. Did I want to buy a Collins 75A-1 receiver? Complete, he said, with a mechanical filter adapter, a Central Electronics Sideband Slicer and speaker.

More than interesting. Through my used ham equipment business I had just sold a highly-modified and really fine 75A-1 from the late 1940s. I sold it reluctantly because I have a real soft spot for the 75A-1. And there is a reason for that.

The caller said his name was Merritt Wissman. His phone number, he said, was area code 616-897-something. My ears perked up. 616? Western Michigan, where I grew up. 897? Hey, that’s my hometown, Lowell!

Impossible!

But — could it be?

I wondered: After all these years, could this be the radio I’ve most wanted to find?

Some memories never fade. It was a crisp fall evening in 1958. I was an eighth-grader at Lowell Junior High School and I’d thought of building a radar transmitter and receiver as a science fair project. As I'd delved into the subject at the Lowell library, I realized the technology was beyond my junior high resources. Our family belonged to the First Congregational Church in Lowell, and at coffee after Sunday service somebody told me another church member was a ham radio operator. His name was Harold Collins.

In those days I made pocket change peddling the Grand Rapids Press and it happened that Harold Collins lived at 225 N. Jackson St., — right at the heart of my paper route. I was a shy kid, and starting up conversations was hard. But I had this tantalizing image of people sitting in front of black boxes talking to other people over long distances without any telephone wires. I wondered how this Harold Collins did that, so one Saturday morning as I made my collections, I knocked at his door. Harold’s wife, Alma, paid me for the paper and then, before leaving, I blurted out my question about ham radio.

There was no doubt that her husband had something to do with radio. Atop their two-story house was a
metal tower and some kind of tubular contraption. I would later learn that it was a 4-element Gotham 10-meter beam.

Mrs. Collins asked me to wait. She thought her husband would want to talk to me. Then Mr. Collins came to the door. I guess he was a guy in his fifties. He had some gray hair, but what did I know? I was 13 years old and all adults seemed elderly. What Harold said had me whistling through the rest of my collections. Why didn’t I come back the next day a bit before nine o’clock in the evening? Each Sunday he talked to some friends in Grand Rapids and I could see what ham radio was all about.

That Sunday evening, Harold Collins led me to the unused bedroom that had belonged to his older son. He called him “Joe” sometimes and other times “Gardner.” Joe or Gardner had been out of the house for several years, first in the Navy and by 1958 he was an electrical engineering student at the University of Michigan. On the wall above the desk was something curious — letters and a number carved out of wood to spell “W8FNH.” Joe’s ham radio call sign, Harold explained.

On the desk, on center stage, was a dark gray metal box with an electrical meter on the left upper panel and a big glass window in the center. Under the window was a smaller, curved glass window. The big window had lines with marks on the glass, but only one small section of glass was lit at any time. A big knob turned a red pointer that traveled back and forth behind the window. Behind the curved smaller window a circular piece of plastic with more black marks rotated as the knob turned.

This, Harold said, was his receiver. It was a Collins 75A-1. Collins, no relation to him, he laughed. But that company happened to make the best radio equipment in the world, and he felt lucky to own this receiver.

In a metal rack standing on the floor was Harold’s transmitter. It looked very neat and was homemade, by whom I didn’t know. It was an amplitude modulation, or AM, transmitter, and when nine o’clock showed on his clock he switched it to transmit and gave his callsign, W8LEZ. Except that he and everyone he talked to said, W-Eight-L-E-Zed.

The antenna on his roof, he explained, was a 10-meter rotary beam aimed at Grand Rapids. His 75A-1 receiver was tuned to 28.620 megacycles, the frequency where his good buddies would be listening. Soon, his transmitter was on and he was chatting away, telling what he’d been doing since he talked to them a week ago. Then, suddenly, he announced that he had a visitor in his “shack” whose name was Joel, and he was handing the mike to me.

I was flumoxed. I never imagined that I’d be talking on the radio. I took the microphone, gulped, and stammered a few lines about being a junior high student who was interested in radar and so on. Finished, I shoved the mike back at Harold and hoped I’d never have that experience again.

Little did I know. It was that very evening that one of the Grand Rapids hams quipped that I was “Joel from Lowell,” a monicker that stuck as long as I operated radio from my hometown.

During the week, that session in Harold’s ham shack stayed with me. I went back the following Sunday. Again, the 75A-1 was on, and I looked more carefully at it. Harold explained the calibration on that big billboard of a dial glass. Frequency. He drew a picture of a sine wave and explained how that was one cycle. In those days, by the way, we spoke of cycles, kilocycles and megacycles, not Hertz. Harold explained that “kilo” was Greek for thousand and “mega” meant million. So you could say twenty-eight-point-six-twenty megacycles or twenty-eight-thousand-six-hundred-twenty kilocycles. Or twenty-eight-million-six-hundred-twenty thousand cycles.

The 75A-1 was a wonderful teaching tool, because the ham portions of the high-frequency radio spectrum were in horizontal lines, backlit, and easy to conceptualize. Most other radios, I would find, had circular dials, part of which disappeared as you turned them.

Ten meters could be a very busy place in the late 1950s. Sometimes while Harold was talking to his pals in Grand Rapids, we’d hear stations from California booming in on nearby channels. That’s when Harold would lift the lid of the 75A-1, reach inside and pull a tube out. He’d take a gray metal object off the table and insert it in the socket where the tube had been.

This object, he explained, was a mechanical filter adapter. Then he explained what a mechanical filter is. Again with pencil and paper, he drew a picture of something he called a “transducer” and explained about
a phenomenon called “magnetostriction.” A transducer, Harold said, changes electrical energy to mechanical energy. A microphone or loudspeaker is a transducer. In Latin, it means to “lead across.” The transducer leads the energy from the state of electrical to mechanical energy. As mechanical vibrations, the signal passes through a series of metal districts which resonate at a certain frequency but reject energy beyond that resonant frequency. You might say they select that frequency, rejecting signals at other frequencies. Having passed through the discs, a second transducer returns the vibrations to electrical energy for use once again in the receiver. If you insert such a device, resonant at 455 kilocycles, into a receiver’s 45 kilocycle intermediate frequency stage, it will easily pass signals that resonate with it but lop off those that don’t.

These were all new words and concepts, and I’d take them to school and mull them over for days. Working 8-pounders like “magnetostriction” into eighth-grade lunchroom conversation isn’t easy, but I was too excited not to try.

April 29, 1959 is a date I’ll never forget. That day I stopped at Harold’s house with a sealed envelope in my hand. Harold took it and we went into his shack. He had me sit down and send Morse Code to him. Then he sent some Morse back to me. Satisfied that I understood, we went to his office. When he wasn’t hamming, Harold was an accountant to many businesses around Lowell. I sat down at his desk and he opened the brown envelope. He handed me a 20-question Novice ham radio test. A few minutes later, I handed it back complete. In June 1959, the mailman delivered a little white Federal Communications Commission envelope and I discovered my new identity: KN8PSV.

By then I’d built my first receiver — a 3-tube regenerative set, the Knight-Kit “Ocean Hopper.” It was pretty sensitive, but had poor selectivity. My hand moving near the panel would change the frequency. But the price, eleven bucks, seemed good. I don’t know what happened to the Ocean Hopper. I probably threw it out or traded it off. My next receiver cost $100. It was a National NC-173, and a real receiver.

Harold Collins warned me that it was a “single-conversion” receiver. More new words. The NC-173 would convert the signal at, say, 14.2 megacycles down to the one and only intermediate frequency of 455 kilocycles. But the conversion process produces two signals — the wanted signal, and another, weaker “image” signal 455 kilocycles away. I would hear duplicate signals 455 kilocycles away from the real signal, Harold assured me. That did not happen with the 75A-1, which had “dual conversion.” By converting the signal twice, the receiver eludes the unwanted image.

It was true. I heard images on the NC-173. But that receiver was a real radio —it even had a radio smell — lubricating oil heating up as the tubes warmed made for a comfy feeling on a cold winter night.

The National had two dials, so how you set one dial affected the frequency readout on the other dial. The idea of having two knobs — main and bandspread tuning — attached to two separate variable capacitors for frequency control seemed like a defective idea after my exposure to the one-dial 75A-1. The 75A-1 was not the first single-dial receiver — National did the same thing with its HRO and NC-101 receivers.

But Harold explained that where Collins was years ahead of the pack was in their use of “permeability tuning.” You could vary frequency either by changing capacitance or inductance. Other manufacturers used variable capacitors to change frequency. Not Collins. Instead of one or two variable capacitors, whose values were more easily affected by changes in temperature, Collins varied inductance in its variable intermediate frequency oscillator. The knob of Harold’s receiver turned a lead slug through a coil in this “permeability tuned oscillator.” According to my 1948 ARRL “Radio Amateur’s handbook,” permeability was then a concept mainly applied to power supply chokes. The idea was to increase the number of electromagnetic flux lines in a coil by introducing a core of iron plates. Instead of fixed plates, Collins constructed an iron screw or slug that would turn in a coil. As the iron slug moved in and out, it would change the number of electromagnetic flux lines which also changed frequency. This approach was less prone to heat-induced drift — it gave great stability, Harold explained. It also made it possible for each turn of the slug to change identical amounts of frequency. This meant “linear” dial calibration was possible. Suddenly the ham had close to frequency meter accuracy in that big dial. And that was not the end of permeability tuning for the Collins designers. The knob turned a shaft connected directly to the permeability tuned oscillator, which eliminated any backlash, the bugaboo of some radios. But the dial shaft also is coupled by gears and a belt to additional permeability tuning coils on a moveable platform. The iron cores of the coils for the first radio frequency amplifier, first and second mixer and first intermediate
frequency amplifier all move together. It’s called “gang tuning.” All of this permeability tuning makes for tremendous selectivity and stability.

My image of the perfect radio was Harold’s 75A-1. I had Collinsitis. By the late 1950s, the current Collins ham offering was the 75S-1, but that was way out of my league. I was a paperboy with a weekly income of ten bucks. I could add to that by working on an onion farm in the summer, mowing neighbors’ lawns, selling Christmas cards. But even the later out-of-production receivers, like the wonderful 75A-4, were too costly.

Eventually, I scraped up enough money to buy a used Collins 75A-2 and matched it with a Collins 32V-1 transmitter. I worked lots of 10-meter DX with that set-up and connected with a few of my neighbors’ television sets, too. The 32V-1 had no shielding to cut down harmonic radiation.

Most of us were still using amplitude modulation when I graduated from high school in 1963, but AM’s reign soon would be over. I went to college, but when I came home I would visit Harold. It was Harold who had explained the beauty of single-sideband to me, using that 75A-1 dial as his blackboard: Imagine the carrier on this calibration mark and consider that when AM is applied, two sidebands appear. One is 3 kilocycles above the carrier, the other 3 kilocycles below. Six kilocycles of band space for the AM transmitter. What if you removed a sideband? Three kilocycles of band space. If everybody did it, the effective spectrum would be doubled. Now, what if you removed the carrier? No more squealing heterodynes!

Even better, he said, now making marks with pencil on paper, consider a carrier with 100 watts of power. Modulated at 100 percent, it should have 50 watts of audio — 25 watts in each sideband. What if you removed a sideband — 25 watts — and the carrier — 100 watts — and poured their 125 watts into the remaining sideband? You’d have 150 watts of power in the speech part of your signal, instead of a mere 25 watts. Quite a bargain.

I was hooked on sideband as well.

With its permeability tuned oscillator, the 75A-1 did not suffer from the frequency drift of other receivers. Such drift was acceptable and maybe not even noticeable on AM where the signal was 6 kilocycles broad. But with the carrier and one sideband gone, it is essential that a receiver hold the single sideband signal without any frequency shift. Otherwise, what you hear sounds like Donald Duck.

What the 75A-1 lacked was a detector for sideband. Harold had to back off the RF gain and run the audio wide open to compensate for strong signal overload. In the 1950s and early 1960s when many hams still were on AM, this was not such a problem. But by 1963, when I went off to college, it was clear that sideband was taking over. Harold was all for it.

But Harold loved his 75A-1. And he had a solution. It was called the Central Electronics Model B Sideband Slicer. It was a stand-alone unit meant to take sideband signals from the intermediate frequency output of a conventional AM receiver and process them with a product detector. The Slicer also had a Q-multiplier to improve selectivity.

One problem: By this time, the early 1960s, Central Electronics was out of business. I recall a visit to Harold’s house when he was very disillusioned. He’d been running advertisements in the Ham Trader Yellow Sheets for a Slicer. People had responded — Hey, I’ve got a mint Slicer, send me your money. Harold sent his money two or three times and got back junk. Finally, someone sent him a fine-looking Slicer.

Harold’s son was by this time an electrical engineer designing avionics equipment and living in California. On a visit to Lowell, Hal modified the 75A-1 so it would work with the Slicer.

I came back from college and visited Harold, who demonstrated what the 75A-1-Slicer combination could do. It was amazing — he’d tune the A-1 to a sideband signal and then finely adjust the Slicer’s vernier until the voice sounded so good you’d think the person was right there in the room.

The 100-watt AM transmitter made way in Harold’s shack for a Heath Marauder sideband transmitter. A Heath Warrior linear amplifier allowed Harold to keep weekly skeds with his son in California.

In the late 1960s and early 1970s, I was in college and graduate school, living in Kalamazoo, Germany, England, Ann Arbor, Mexico, Africa and finally southwestern Michigan. I hadn’t seen Harold in some time,
but I heard of him. My uncle, Charlie Houseman, was an old friend of Harold and related that he’d finally bought a brand-new rig. Some kind of transceiver.

On December 23, 1981, Harold and Alma Collins were going to look at a Nativity scene near their Congregational church in Lowell. It was dark and snowing hard. As they crossed the street a driver, blinded by snow, struck and killed Harold and Alma.

When my parents came to visit at Christmas, my mother told me. It was unbelievable. This great guy, who had taught me so much, was gone.

Some time later, my mother called to say Harold’s son was selling his ham radio equipment. Was I interested?

To tell the truth, yes, of course. I was interested in one thing. Harold’s 75A-1. It was the first ham radio receiver I’d ever seen. It was an icon to me, the perennial teaching prop as Harold had explained this and that principle of radio.

More than that even, it was — to me — a part of my memory of Harold Collins.

The idea of trying to acquire a piece of his property after such an untimely, tragic end repulsed me. I said no, I didn’t want to take part in any sale of his radios. The idea seemed almost ghoulish.

But that doesn’t mean I didn’t think about Harold’s 75A-1. Often, very often, I thought about it. What, I wondered, ever happened to that radio? Probably sold to an overseas collector, I assumed.

I’ve bought and sold several 75A-1s. I know why Harold considered it a premier receiver. It was, in fact, a major step forward in receiver design. Collins touted it as a revolutionary concept in receivers when they introduced it in 1947. In the manual, Collins called it “the first really new amateur receiver since the advent of the superheterodyne circuit.”

Not only did the Collins engineers use a permeability tuned oscillator and permeability tuned circuits from antenna input through first intermediate frequency stage for tremendous stability. Where all other receiver designers called for simple tuned circuits in the first radio frequency amplifier stages of their receivers, Collins had crystal-controlled converters translate the received radio signals to the first mixer. Actual tuning was done with the permeability tuned variable frequency oscillator running between To the inherent stability of permeability tuning they added the stability of the crystal oscillator. Because the quartz crystal converter stage used fixed frequencies, the first intermediate frequency stage is tunable between 2-3 or 4-6 megacycles. Then, to dodge those images (Collins claimed 50 db. of image rejection) the signal was converted again to the second intermediate frequency of 500 kilocycles. “The receiver features an image ratio, selectivity and sensitivity not found in many receivers of modern design,” the 75A-1 manual boasts.

Stability and 1 kilocycle dial accuracy alone were major advances, and Collins copied the 75A-1 in its 51J, a general coverage receiver the firm introduced in 1949 mainly for government customers. The 75A-1 principles appeared in later 75A-2, -3 and -4 models, through the 51J-4 and in the 75S receivers and KWM-2 transceivers, survived fore decades until the technology was replaced with frequency synthesis.

Over the years after Harold’s death, I tried to contact Harold’s son. I knew he’d dropped W8FNH and had a California callsign, but I didn’t know what it was. I’d heard him referred to as “Joe” and “Gardner.” With the Internet, I’d plug “Joe Collins” and “Gardner Collins” into search engines and get nothing. Then in February 2000, he came to me. That month, QST published my cover story about a Collins 75A-4 homebrewed by a onetime Collins technician. “A 75A-4, One Piece at a Time” caught the eye of an engineer in southern California. His name was not Joe, it turns out — that was just an on-air nickname he used back in Lowell. And Gardner was only a piece of it — his middle name. No, he was like his dad, Harold Collins, now W6JES and going by Hal.

Hal, the son of my mentor Harold Collins, is an antenna design engineer who worked on Apollo, GPS and space shuttle projects. We corresponded several times by e-mail, but I never asked him what happened to his dad’s 75A-1.

The phone rang that crisp October afternoon and I heard one Merritt Wissman, KA8DMP, aka “Curly,” describe a virtually mint 75A-1 with mechanical filter adapter, Central Electronics Slicer and speaker. Yes, he was just outside Lowell.
I asked him if he’d known Harold Collins.
No, he said. He never knew Harold.
Well, I thought, close but no cigar.
But, Curly added, “I bought his 75A-1 at an auction from his son.”
So Harold’s radio had found me.

As we ambled through the art museum that afternoon, my mind was only partly on those wonderful suits of medieval armor, the great Picassos and the amazing Diego Rivera mural.

I’d arranged to visit Curly the following Tuesday. It was election day, and my Detroit Free Press assignment would begin after polls closed. I had the day to collect Harold’s 75A-1.

I’ve gone on some pretty exciting radio quests. When I first got the homebrew 75A-4, it was something of a curiosity which over time, as I considered and reconsidered it, revealed itself as an amazing find. When I was offered the Central Electronics 100-R (November 1998 QST, “Zenith’s One-And-Only Ham Receiver) I put the phone down and drove straight to Chicago.

As we got ready to go to the museum, my wife, Karen Fonde, listened as I described the call from Curly.

"It’s a big deal," she said. "It’s part of YOUR history.”

This was a radio that could mean much to only one person. Well, maybe to Hal, too, but as I would find, it was my experience of sitting for hours in Harold’s shack before that lit billboard dial that made this MY one-and-only receiver.

I’d never embarked on so personal a radio quest.

The day before I went for the 75A-1, I sent an e-mail to Hal Collins.

“Hal — Over the years, I’ve wondered what happened to your dad’s 75A-1. That was the first amateur radio receiver I ever saw. I recall him lifting the lid to pull a tube and insert that mechanical filter adapter. He explained then how a mechanical filter works. He tuned onto a sideband signal and explained how SSSC works. I also recall how much trouble he had getting a used CE Slicer, with guys selling him their junk boxes. And I remember when he finally had a Slicer, demonstrating how slowly the vernier would tune across a signal, making it intelligible. I can trace my fixation on Collins Radio gear to that receiver and your dad’s tutelage. And as I say, I’ve often wondered where it was. Shipped to Japan, probably. I wondered what it would take to find that radio. I mean, locating it, to me, the RadioFinder, would be the ultimate Radio Find.

I found a message from a guy who says he bought your dad’s 75A-1 in an auction you held. The radio never left Lowell.”

Hal sent this back: “Joel, your note is something special about dad’s receiver. Off the top of my head I’m not sure who bought it at the estate sale back in ’81. That was a pretty messed up time, Some things I remember vividly. Other stuff is smushed. Affected me for years. Especially around the 23rd of December. Am sure anxious to find out about your visit. It must be Dad’s A-1. This event is outstanding. Or maybe it’s best described as ‘awesome.’ “

Lowell is a two-hour drive from my home in Plymouth, Mich. Maybe less on this day. Curly’s house is in the country, easy to find, just off the Interstate.

We shook hands, exchanged curt greetings and he led me into his shack. There, sitting on a shelf above his Kenwood transceiver and near a Collins 75A-4, was Harold’s A-1.

Curly said he decided to sell the 75A-1 after reading a story in November 2001 CQ magazine by Joe Veras, N4QB, which mentioned the revolutionary receiver from Collins. That story made him think he had a valuable collectible. Curly knew from reading QST that I’m interested in old ham radios. So he gave me a call.

Curly was not a ham when he was high bidder for the 75A-1. The ham ticket came later, inspired partly by his ownership of that wonderful 75A-1.
I turned the 75A-1 on and switched on the Slicer. Signals came pouring out of the 75A-1 like they did that evening in 1958 when I first saw this set.

Here it was, a five minute drive from where Harold lived in Lowell.

And here was I, loading his 75A-1 into my car.

Twenty-one years after Harold’s death, did I feel like a ghoul snatching up his radio?

No. I felt exhilarated. I was communing with not only my past, but with the personal history of a man who helped me learn about radio.

From Hal, I learned the story of how Harold and Hal happened each to buy a 75A-1, unbeknownst to the other.

It was in 1955, and Hal was in the Navy, stationed in Kodiak, Alaska. He and his dad had together dreamed of finding a 75A-1. The station in Lowell used a Hallicrafters SX-43 – a decent radio, but no match for the Collins. In Kodiak at the Navy base, Hal was using a National NC-183-D — “a great performer,” recalls Hal. “Personally, I wanted a Collins receiver. Model? Hadn't decided.”

“Collins had all the attributes: Selectivity, stability, sensitivity, bandspread, calibration, etc. The A-1 was being traded for the newer A-2 and A-3 at the time. Henry Radio in West L.A. was reselling the A-1 for something like $180 for a good, clean unit. With some minor modifications described in CQ ca. 1952, performance could be greatly improved, e.g., two or three changes in vacuum tube types resulting in lower front end noise and greater throughput gain. So I told Dad that I was going to get an A-1 when I got out of the Navy. It was significantly less in cost than the newer Collins receivers.”

“As it turned out, I had the chance to obtain an A-1 while still in Alaska, unbeknownst to dad. And unbeknownst to me, dad bought an A-1 for me from World Radio Labs, Leo Meyerson’s operation in Council Bluffs, Iowa. So when I returned to Lowell in April, 1955, Surprise! Surprise! So dad kept his A-1 which he substituted for the SX-43. And I kept my A-1.”

Hal said his wife, Dottie, was not excited about this purchase. Harold and Hal were paying about $200 for the 75A-1 in 1955. Adjusted for inflation, that would amount to $1,318 today. No wonder Dottie was not thrilled. But it’s better than the 1946 price of $375 when it was new. That would be $3,394 now.

From Hal, I learned that my radio mentor was Lowell’s radio pioneer as well. In his twenties in the 1920s, Harold Collins and a friend built the first radio in town. With a 200-foot-long wire antenna, the could pull in stations like KDKA in Pittsburgh and KOMX in St. Louis. A collection of his dad’s home-built broadcast radios inspired young Hal to build two-tube regenerative receivers during World War II. Via shortwave radio, Hal, a junior high kid, heard news of the Japanese surrender in 1945.

“I woke my parents up and said, ‘Hey, the war is over!’” recalls Hal. “They said, ‘Go to bed — you’re dreaming,’

In 1950, Hal passed his Advanced Class ham radio exam and receiver the FCC callsign, W8FNH. In the summer of 1952, Hal was in the Navy. He got a letter from his dad, who noted his new General class callsign: W8LEZ.

“It surprised me — I didn’t even know he was doing it,” Hal recalls.

By summer of 1953, Hal was stationed with the Navy in southern California. His parents drove from Michigan to visit, and his dad contacted him from the car using his mobile Multi-Ecam rig. That fall, the weekly Lowell Ledger featured Harold and Hal as the only father-son ham radio duo the paper knew of in the area.

When I knew him, Harold was a tax accountant, keeping the books for private people and big businesses in the area. But he was also an expert photographer. One spring day before I left for a summer as an exchange student in Germany, Harold took me and his Exakta camera into his backyard and instructed me in the basics of photography: The lower the f-stop, the bigger the aperture and the greater the light that reaches the film. The lower the f-stop reading, the less depth of field, and so on. I still recall those lessons today when I take pictures.

Turns out that Harold and Alma moved to Chicago during the Depression and opened Sunnyside Studio.
They did portraits, shot weddings and had a booming mail-order film developing business. But on weekends, his dad would disappear, said Hal. He played trumpet with the big bands in Chicago. I recall that in Lowell when I knew him, Harold was still playing trumpet on weekends in a group called The Nomads.

Like his dad, Hal found a Central Sideband Slicer for his 75A-1. The father-son duo had duplicate receiving systems. Hal’s transmitter was a phasing rig he built. It was similar to a Central 20-A, except that it drove a pair of 4CX-300-As to better than a kilowatt.

I’d wondered about that AM transmitter Harold was using on my first visit to his shack. It was a 100-watter with 829B final amplifier. Hal built it when he was in the Navy.

Harold replaced the 829B rig in the 1960s. The new transmitter was a Heath Marauder sideband transmitter. By the 1970s, Harold was tired of the Marauder’s regular breakdowns. He bought a Yaesu FT-101-E transceiver, but was so attached to the 75A-1 that he devised a way to use the Yaesu as a transmitter while receiving on the 75A-1/Slicer.

After his dad’s death, Hal recalls selling the 829B rig and his homebrew sideband transmitter to a Lowell police officer. He couldn’t recall the guy’s name. I considered running an ad in the Lowell Ledger newspaper: WANTED: radio equipment formerly belonging to Harold Collins, W8LEZ. On a Christmas 2001 visit to my parents’ home in Lowell, my mother showed me an article in the Grand Rapids Press about a student ham radio club at Lowell High School. It was organized by the high school security director, Al Eckman, WW8WW. I remembered Al – he was Lowell High School class of ’60, three years ahead of me. And I remembered that Al had been a cop in Lowell.

“I bought that equipment,” said Al when I phoned him. “But I sold it.”

Many of us collectors try to recreate our early stations or stations of mentors like Harold Collins. Seldom do we find the actual artifact — we simply find similar rigs. They’re stand-ins, but we make do.

Now I can recreate part of the first ham station I ever saw. I have Harold’s receiver — the same receiver he used, not just a duplicate.

What about a transmitter?

I don’t have a 32V to go with it, but I could use my Johnson Viking II, my Heath DX-100, or my Johnson Invader 2000. Or maybe a Central 100-V or Hallicrafters HT-32-B. Or, hey, a rare Hallicrafters HT-20. All roughly contemporary with the 75A-1.

All surrogates, I’m afraid.

But wait! It once seemed implausible, but today Harold’s 75A-1, the radio I most wanted to find, is now in my shack. What if …

Has anybody seen a 100-watt AM transmitter?

It would be a homebrew rig. Rack-mounted.

With an 829B final.

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**Editor's Thoughts**

The newsletter has become somewhat of a echo box for items posted on Larry's List and items posted from ARRL ARES E-Letters and Letters. I hope to bring some things out of the thick of news items and highlight changes that we all need to be aware of. I enjoy doing the newsletter, and plan to do so unless I start getting feedback that there is not much news here. I hope you continue to enjoy the KAR for the foreseeable future.

Kent, KBØRWI, KAR Ed