

Weekly Nets: 3820 KHz Roundtable, Sundays @ 4 p.m. ● 147.255 Repeater Net, Wednesdays @ 8 p.m.

Monthly Meetings: 1st Thursdays @ 7 p.m., Highland Christian Church, 1500 Forest Hills Blvd, Bella Vista

Club Call: N5BVA • Repeater: 147.255 +offset, pl 162.2 • Website: www.bellavistaradioclub.org



## BVRC NOVEMBER MEETING PROGRAM

# RADIO ASTRONOMY FOR HAMS

Rick Marshall – KG5TOA brought a fine program to BVRC for our November meeting, and a very different and informative program it was: Radio Astronomy for Hams. Rick, who is President of the Sugar Creek Astronomical Society, is also part of the "NWA Space" group that is rebuilding a large refractor telescope donated by a northern university. Although a relatively new ham, Rick holds an Amateur Extra class license, and heads a special group of 'data scientists' doing analytics and statistical forecasting for Con Agra across the U.S., from Springdale.

Rick explained that radio astronomy is studying celestial objects using radio frequency instead of visible light.

Radio astronomy often uses large radio antennas and arrays. Some of the frequencies that are used in R/A are 70cm, 1.2cm (water vapor), and 21cm (hydrogen). Radio telescopes measure distance, spectrum, and other related parameters.



Rick then shared some R/A characteristics that are found in our solar system, for example – Jupiter. Jupiter is a very interesting radio object. It emits all types of radio waves, basically by two methods: 1) Plasma at the north pole of its magnetosphere, and 2) Gas from the Galilean moon IO. Rick advised to go to You Tube and query "radio signals from Jupiter" and "radio signals from Saturn" for some really interesting clips on radio astronomy.



The Sun – also a radio source – is Rick's current project. Its surface at times reaches 1 million degrees. Plasma being injected in to space is a major radio source. Rick said that the "radio sun" is larger than the "visible sun", due to the activity of the sun's atmosphere. And of course, solar storms and flares are a big source of radio waves.

Rick then migrated into the very interesting topic of Meteor Scatter. Radio signals bounce-off ionized trails of meteors as the burn through the atmosphere. Rick has created a homebrew radio telescope receiver to actually track incoming meteors.

It was a great pleasure having Rick with us for this month's program, and his unique information and knowledge provided a very interesting presentation.

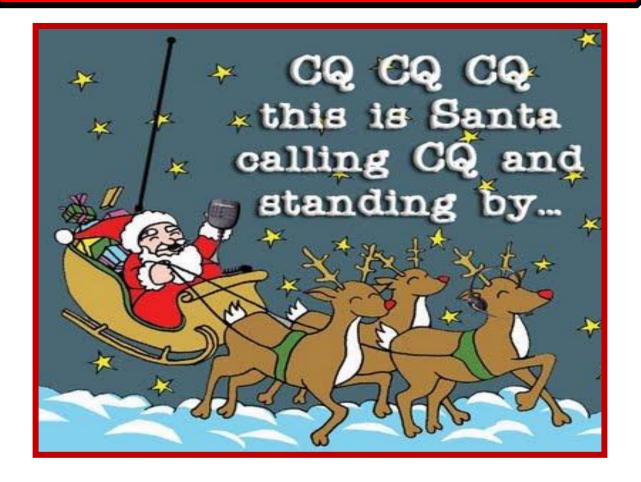
Rick's presentation concluded with President Glenn Kilpatrick – WB5L bestowing upon him BVRC's Certificate of Appreciation for his visit with us, and his fine program.



## **Z-METER SIMPLEX TEST DECEMBER 5!!!**

(7 PM JUST PRECEDING THE WED. 2-MTR NET)

Contact Chuck - WØCEH for more information: cehealy1@gmail.com





## BWRG Officers:

President
Glenn Kilpatrick, WB5L

Vice-President
Chris Deibler, KG5SZQ

Secretary
Wayne Patton, K5UNX

Treasurer Marc Whittlesey, WØKYZ

Technical Officer Steve Werner, K5SAW

Repeater/Club Call Trustee Fred Lemley, K5QBX

## Appointed Chair Positions:

Social Media Committee Jen Kesseler, KG5WOC

Emergency Communications Committee

Chuck Healy, WØCEH Lorrie Healy, N1RNI

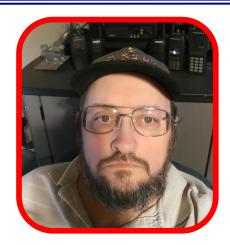
V & Testing Committee Glenn Kilpatrick, WB5L

Membership Committee Ron Evans, K5XK

**Newsletter Committee Don Banta, K5DB** 

December 2018 The SIGNAL Page 8





This month THE SIGNAL salutes another valued BVRC member, James – KD5RXI.

James is a network technician for Wal-Mart, and resides in Centerton with his wonderful XYL Jaime, along with their wonderful sons Hunter, Brayden, and Henry. James tells us that none of them are hams as yet, but he's working on Brayden at present, and hopes he'll come around to the hobby.

When James came home after serving in the Navy, he went to work for Glen Martin Engineering building Martin Towers and Hazer Antenna platforms (very interesting!). The entire Martin family were hams and that got me interested, but it was almost 10 years after I left there that I actually got around to acquiring my license.

James credits his elmer as being Matt Harker – KD5DBH from Rose, OK. Matt built upon James' general interest in radios and encouraged him to get his ticket.

When asked what his favorite facets of ham radio are, James said, "I enjoy being able to help others. Through ham radio, I have been able to do that by providing communications after disasters and during storms. I operate almost entirely on UHF & VHF, mostly on repeaters. Prior to my relocation to NW Arkansas, I had started becoming active in DMR, but that is limited here and I do not yet have a hotspot."

Most of James' equipment consists of older Motorola and Kenwood commercial gear, none of which is currently set up. He also has a few actual ham radios which includes an Icom IC-270H in his van and a Kenwood TM742 that he plans to mount in a vehicle eventually. He has a couple Baofeng handhelds for times when the radio could easily be damaged by the activity at hand and a Connect Systems CS750 for his DMR adventures.

When he's not on the radio, James enjoys a good day at the gun range or the lake. He has also always had an interest in model railroading. He is hoping to get an N-scale layout up and running sometime next year. He says he has most of the items needed, except the time and space. He is also quite into computers. He had a computer repair shop for 9 years before he moved here. He loved working on computers and helping his customers better understand their investments in technology.

James it is an honor and a pleasure to have you in the BVRC family!!!

# FROM THE DESK OF THE PRESIDENT

Our annual Christmas Dinner/Party is fast approaching, and we would like to see you and your families attend. A the last couple of parties, we have had a good number of members and families, but there is always room for more! Come by for some good ol' eye-ball QSO's and ham radio camaraderie! We will be giving out some fantastic awards and I am really looking forward to it! We will once again be having a few door prizes. The main door prizes will be an Azden PCS-7000H transceiver. Collect your drawing tickets at the door when you give your \$5. Search around your shack for any possible door prizes to donate and bring them with you. I would like so many door prizes that we could play "Dirty Santa" .... All I can say is that the blessed winner will be operating on 2-meters.

Let's all plan for a different kind of 2-meter net on Wednesday Dec. 5th, an hour early at 7:00 p.m. We are going to test "When all else fails" with a simple exercise to see who can hear who on 2-meter simplex. This should be fun, and I think surprising as we find out how we do without a repeater. Stay tuned for all the details.

As we go into this Christmas holiday time, please remember the reason for the season. Yes, we are ambassadors of amateur radio, but also ambassadors of Christ Jesus. Whether we realize it or not, we act as a representative or promoter of the activities of amateur radio and Christ Jesus, and our community is watching us. The communities we represent are looking to us for information and answers about our wonderful hobby of amateur radio. The same people need to hear the blessed message of Christ Jesus. Let's step up to the plate, and boldly move into the greater blessings that these two areas of our lives have to offer. Of course, without the providence of the Father in Heaven, the beloved frequencies our messages are riding on would not be. Just think of the way all the various pieces and parts of amateur radio technology fit together, and one can definitely say that the Father in Heaven had his hand in its making. So remember, Santa Claus is watching, be a good ambassador, elmer, and friend. Enjoy your holiday time and be thankful.

Merry Christmas - Glenn, WB5L

# CARVING-OUT TIME FOR HAM RADIO

Many times, after a person acquires their first amateur radio license, which is usually the Technician, if you ask them how much time they are spending on the air since acquiring their ticket the answer varies from "not much" to "zero".

This is not uncommon. Lots of people seem to get a ham radio license and then do very little with it. One reason for this is that they don't consider how much time the hobby really can eat up, due to the many areas that amateur radio encompasses.

They get their ticket because it seems like a cool thing to do, but then they have to carve-out some time to actually become a ham radio operator. Even if you don't make any of your own gear, setting up a station takes time, and then there is the operating time, of course. Carving time out of busy schedules is a challenge.

So, if you're a busy person, how do you make time for ham radio? Here are four points that might help you:

- I. Schedule it. Set aside a specific time during which you're going to devote to ham radio. Don't let that time get preempted.
- 2. Designate a place in your home for ham radio. Having to set up your radios or dig out your tools every time you want to operate or build something is not much fun and wastes a lot of time. Having a "shack" and a workspace designated for your projects will let you spend more time on the fun stuff.
- 3. Partner up. Arranging to work with another ham will make it harder to put-off ham radio for some other activity. Besides, it's a lot of fun to do things with other hams. If you're a newly licensed ham, find an Elmer. There really are plenty around who would be willing to help you.
- 4. Create a project plan. Setting up an amateur radio station is no small feat. Breaking it down into smaller chunks will make it seem more manageable and attractive to you, and you'll get a feeling of accomplishment when you meet your in-between goals.

Having said all this, enjoy your hobby but remember — that's what it is... a hobby. It should always come AFTER — and never be substituted for — faith, family, community, and country.





The November meeting was well-attended with 43 members and guests. Among first time guests were **Pat/KD6APA** and **Nick/WA5BDU**, both new Bella Vista residents, and two guests from the Eureka Springs/Beaver area, **Steve/W5KI**, and **Cliff/KM4ZRZ**. From Bentonville, father and son, Adil and Issa Abboud, **KF4YKJ**. Issa is the son and licensed ham – at age 11! Other guests were **Hank Kress/K8KBW's** son Michael from CA, and **Rick/KG5TOA**, our program presenter from Springdale.

**KI5CAM** – New member Clayton Hornsby has received his new Technician license and callsign since joining BVRC last month. Congrats Clayton!

**WB0AUQ** – Bob wants to hear from those interested in Saturday morning outings to area parks where a small group would set-up portable QRP HF gear/antennas to operate "in the field" for a few hours. Bob reports such outings were popular and enjoyable during his years in the Lawrence/Kansas City area. Meet-ups begin with breakfast at Duffer's Café, on Hwy 340/Lancashire Blvd, on Saturday mornings.

**WQ5T** – Kathy, along with OM W5JAY have been enjoying some great DX with their new SteppIR HF yagi (as shown in the October 'Signal').

**WB5L** – Kudos to Glenn for completing the 6 week "CW Academy," earning a handsome certificate. Glenn was in the advanced Level 3 class, and was sending 30 WPM (Words Per Minute) in late October. Wayne/K5UNX is also a past graduate of the CW Academy, which is conducted by the CW Ops club.

**K5XH** – Mark continues to stretch the capabilities of his new Flex SDR transceiver, operating "SO2R" (Single Op, 2 Radios) and also "remoting in" to his shack from work communicating with some 'juicy' DX from work in Springdale.

**KØDKL** – When back in Bella Vista, Dennis operates 'portable' from his condo in the Metfield area using what he terms a "very compromised" End-Fed Long Wire. Dennis and Mary Clare split their time between here and Apple Valley, MN. Dennis has been checking-in to the Sunday 3820 roundtable.

**KG5MWG** – With the assistance of several area friends, Rick recently removed a standing Rohn 25G tower in east Fayetteville that will be installed at his Tontitown QTH. The ground crew included BVRC members Paul – KK5II and new member Bill – KG5ZCI.

**KK6LNC** – Sonndra reports that Jeffers' October surgery in Nashville was so successful that doctors believe he is now 'cancer-free!' Jeffers continues dialysis, so keep the Dodges' in your prayers.

**WØCEH** – Congratulations to Chuck for having been named chairman of the Benton County 'Amateur Radio Emergency Service,' or ARES—and has also been named the Assistant District ARES Coordinator.

**K5UNX** – Wayne has a new 80 Meter End-Fed Half Wave (EFHW) antenna that allows him to participate in the Club's weekly "3820 Roundtable" on Sunday afternoons.

**K5DB** – Don made 825 contacts during the ARRL Sweepstakes CW weekend with the Razorback Contest Club call KE5XX. He missed only the U.S. Virgin Islands for a 'Clean Sweep' of all 83 ARRL Sections. New BVRC member Nick – WA5BDU also participated in the event

**AF5YM** – Steve lives two hours east of us in the Ozark National Forest. Steve is south of the Buffalo River in Newton County, one of the most rugged and least populated – but most beautiful counties – in the U.S. KA5IXE is a new neighboring ham, who promises to accompany Steve to a BVRC meeting in the near future.

**KEØMWG** – David has accepted a position in Wichita, KS as an emergency planner. Congrats David & Alexis!

## BVRC Member's Corner continues...

**K5GBF** – former club member Harold Plunkh, now living in Seminole FL, experienced serious health issues and a tornado in October, but happily reports there was no damage.

**K5XK** – Ron asks that members who would like to receive periodic emails from the ARRL Public Relations department detailing news coverage that Amateur Radio receives around the country, to let him know. These Radio/TV/Newspaper stories may give us ideas for generating similar local publicity. To be added to the distribution list, email Ron at <a href="mailto:K5XK@arrl.net">K5XK@arrl.net</a>

#### REMINDER.....

You don't have to write like William "Bill" Shakespeare in order to write an article for The Signal. --- In fact, we prefer articles without the words "thy", "whilst", "tis" and "oft".



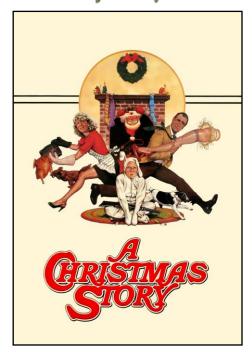
Working on a new kit or homebrew project? Have you recently received a rare or interesting QSL card to share? Received a new radio award? Or just have a cool photo (ham radio related) or some comments to share with other club members? Maybe you have acquired a new piece of equipment, or constructed a new antenna? Had something ham radio related happen to you during a trip? ----- Why not write an article for The Signal? The article can be short or long, simple or elaborate. Please include pictures! We're always looking for material for the BVRC newsletter and feedback from our readers goes a long way toward keeping the newsletter interesting. So why not give it try? Write an article and send it to the newsletter editor, and we'll get it in there! It's fun, and at the same time your contribution helps support BVRC and our hobby! Articles can be submitted electronically or on paper, whichever way you feel most comfortable Send pictures, too! As The Signal editor, I with. particularly look forward to putting a new issue together when I have material submitted by our club members. Hope to hear from you soon & 73! (Send it in!)

Submit your material to:

Via e-mail: <a href="mailto:arsk5db@gmail.com">arsk5db@gmail.com</a>
Via regular mail: Don Banta, K5DB
3407 Diana St.

Springdale, AR 72764

# A Christmas Story Shep Style !!!



Undoubtedly, most of you are familiar with and may have watched (many times!) the movie "A Christmas Story".

But, did you know that this story was written by one of the most famous amateur radio celebrities - Jean Shepherd K2ORS (SK, call re-issued)? What you may not know, is that this story originally appeared as *only one* chapter in Jean's book, "In God We Trust, All Other's Pay Cash".

Shep, as he was affectionately known, also had a long running radio program on WOR-AM radio in NYC.

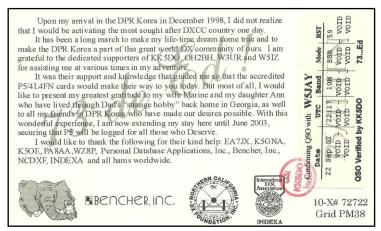




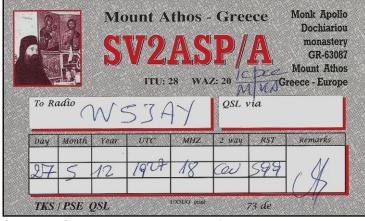
Thanks a bunch to Jay – W5JAY for sending a great story regarding a couple of rare and coveted cards that he has in his possession. Although I (K5DB) am tickled pink for him, that pink is also mixed with envious green (hi, hi) that many DXers would share with me, in that these 2 cards are TOUGH – practically impossible – to attain (I haven't worked these countries yet!). Here's his story:

For this first QSL, I just started chasing DX casually after being in the hobby for nearing 30 years! Talk about being a late bloomer..... I got into the hobby in late 1972 and DXing just never interested me. I loved working long distances, but for some reason the DX bug didn't bite. I think if I had a good elmer to get it hooked on DXing and show me the right way to go about it, I would have been a DXer sooner in my ham radio experience. I loved everything in ham radio, but the DX bug didn't bite until the late '90s! I was more interested in 10-meters, antennas, contesting, rag-chewing, AM, and QRP during the first few decades. Plus, I loved to build things which left little air time. One day I was cruising 10m and came upon a pileup and thought what they heck. I just barely knew how to break a pileup at the time, but if it remember right they were working simplex? It was P5 (North Korea)! Little did I know (which I didn't at the time) how rare that one was or would stay over time!





The 2<sup>nd</sup> QSL is from Monk Apollo at the Mount Athos monastery in Greece. It took me *over a decade* to work him! Once I knew about Mt Athos being its own country (entity) I had already begun taking down the beam and tower after selling my house in Fort Smith. This was after Kathy and I got married. After 300 countries one starts to look at what he needs very carefully. After moving in the new QTH I just used compromise antennas like a 44 foot each side of center doublet or later a 45-foot vertical. The band I finally worked the Monk was on 17m with the 45-footer.

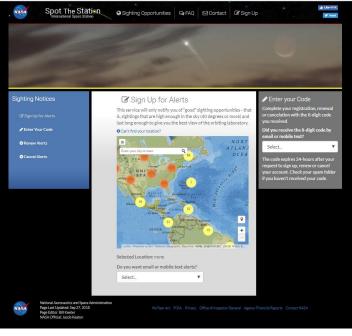


(Thanks for the great story, Jay!)

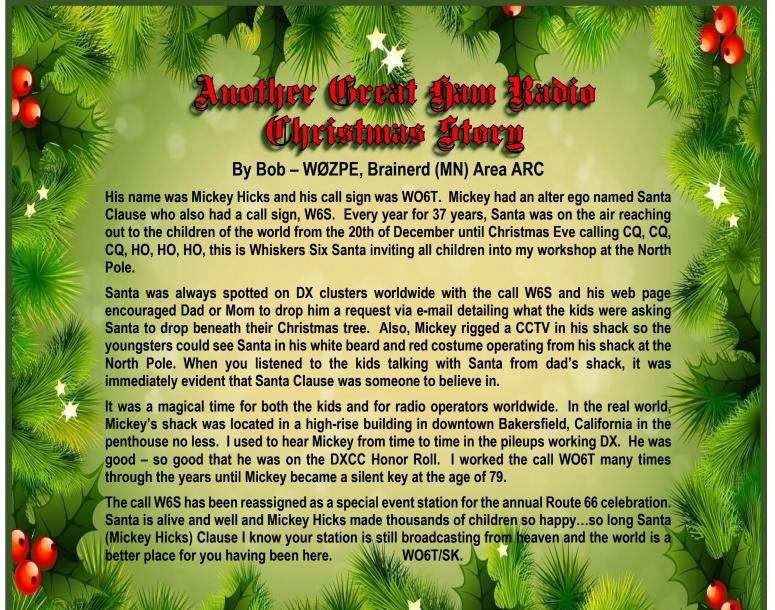
# WELCOME NEW MEMBERS!!!

Nick Kennedy – WA5BDU Steve Norris – W5KI Bill Durham – KG5ZCI





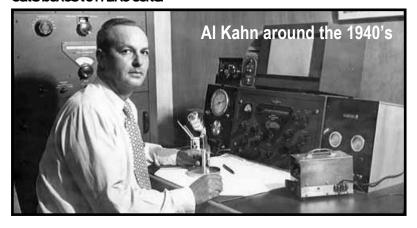




# TEN – TEC: Made In The USA

In 1919 at age 13 Al Kahn became interested in amateur radio when his Boy Scout troop acquired an El. Company "wireless set." After setting up the radio, Al and his troop discovered that the set did not work

Kahn convinced the scout master to let himwork on the radio. He took it home, fixed it in about an hour, and once it was operating. At heard NAA, an early US Navy station, transmitting. That did it; At was hooked and began to study amateur radio in earnest. He soon linked-up with three boyhood friends who shared his interest in radio. Two years later, in 1921, he received his first license from the Department of Commerce. That government office issued amateur radio licenses, not the Federal Commutations Commission (FCC), as the FCC had not yet been formed. At sfirst call sign was 9BB. Kahn was quoted saying, "We used ink bottle tops for the knobs and wound wire around Quaker Oats boxes to make coils."



As a teen, besides his passion for radios, Kahn loved riding motorcycles. In those days a popular brand was the Indian. Much later in life, Al got a call telling himhe was getting the prestigious Army-Nevy E award. Hs secretary, who took the call, told the caller he was out-on his motorcycle. He used the cycle on company errands.

In 1922 at age 16, Al obtained a half-kilowatt rotary gap transmitter. Al decided to build his own Hartley oscillator using a UV202 tube. The oscillator was only the start! CW or continuous wave (used for transmitting with a key by means of Morse code)

had become part of communications and ameteur radio. Kahn loved it. With 400 volts on the plate, and using an antenna current of 1.3 amps, he was able to get about 10 watts input. Hs whole rig was set upon a bread board. At spent many hours as a teen working his station. In the early 1920s, the only amateur radio band was 200 meters, which is basically at the top of the AM broadcast band today. He and four other buddies, all boy scouts, purchased some Ford spark coils and held daily QSOs across South Bend, using crystal sets for their receivers. It was good fun and Kahn found his one lasting interest that would be a lifelong passion-ameteur radio.

#### **ELECTRO - VOICE**

In 1927 At decided to form his own amplifier, speaker, and microphone business the Radio Engineering Company. The newbusiness was located in the basement of the Century Tire & Rubber Company, a retail tire and gas station in South Bend. During the period 1927-1930, Kahn Recognized the need for better microphones for public address systems. He gradually figured out how to make a system that worked after meeting Knute Rockne, the legendary Notre Dame Football coach. Knute, who was in poor health, complained to Kahn that he could not be heard during practice sessions with his team He asked At to help. At was happy to try. He built a box and in it he put an amplifier, speaker, microphone, and switches. Kahn's company devised a system featuring separate loud speakers pointed at each of the four fields. By flipping a switch Rockne was able to amplify his voice and direct it to any one of the fields. The coach loved the system and referred to it as his "electric voice" A liked the term but altered it slightly to Electro-Voice. In 1930 he officially renamed his company Electro-Voice and incorporated the business.

Kahn began to experiment with microphones, continually developing better ones. Al decided to construct a velocity – or ribbon – microphone and couple it to a public address system Prior to Al's innovations microphones were mostly carbon button varieties, and much less effective. Al's company soon became a major supplier of microphones to the public address industry and later supplied microphones to the television and motion picture industries as well.

As the years sped by, so did the phenomenal growth of sound and communications. Electro-Voice in the 1950s developed and patented a torque-drive phonograph pick-up cartridgethat could reproduce stereosignals—the first todo so. This resulted in a glut of orders from literally every manufacture of phonographs in the US and abroad. After the war years, Al bought up trainloads of electronic parts and seeing that some of them where surplus to his needs, they were supplied to Heath and were used in the OI Oscilloscope kit, the first Heathkit product.

### **GULTON INDUSTRIES**

E-V completed a merger with Gulton Industries in 1969. Al served on the board of the parent company, a conglomerate that owned thirty some industries, but he had a disagreement with Gulton and left the company. Al said he was not cut out to run a public-owned company...it was anathematic to everything that he had done in his lifetime. Not yet ready for retirement and a rocking chair, Kahn decided to buy the property adjacent to the (new) Gulton location (formerly the Sevierville Electro-Voice plant) and he and Jack Burchfield founded Ten-Tec, an equipment manufacturer. Burchfield (W8CDR - later K4JU) joined the Electro-Voice team in 1958 and became a trusted leader in the company. He worked with Al for ten years, but then left himfor a position in New Jersey. Burchfield, whose call sign was W2EIKin 1969, had been senior engineer of loudspeakers in Electro-Voice's engineering department. When Al called himone day and told himabout his plans for opening a new business called Ten-Tec in Sevierville, Tennessee, Burchfield joined the new company and became its president. Although A's vision was to specialize in amateur radio equipment, he did not limit his interest, and his ability to explore new areas has contributed to Ten-Tec's success over the past forty years. In fact, it is a riveting story and involves many people, all who lived his dream and turned it into a reality.

## TEN-TEC: A NEW BEGINNING

The Ten-Tec saga actually began in 1968 when Al Kahn and Gulton Industries parted ways. One can only wonder what Doc Gulton must have thought as he watched Al and his company erect a new, modern Ten-Tec building right across the street from them. It's ironic that the Gulton Industries plant closed in 2001 and was torn down. With the completion of the new building a new era began. The Ten-Tec building was smaller than the old Electro-Voice plant, but Ten-Tec represented something new and dynamic for Sevierville.

Ten-Tec's manufacturing history began with the PM (Power Mite) series of low power (QRP) equipment. Not long thereafter, they manufactured the TX-100, the only radio they produced that was a crystal control rig, largely due to the time when it was built. Ten-Tec also produced the RX-10, then the Argonaut, Century, Corsair, Jupiter, Orion, and Ormi series The Argonaut, was the first multi-band QRP transceiver. In fact, Ten-Tec was the first to build an all-solid-state transceiver as well as the first solid-state amplifier for ameteur radio.

#### KAHN'S KNOWN ACCOMPLISHMENTS

Al Kahn accumulated many honors over his more than eight decades as a radio ameteur and industry figure. He was inducted into the CQ.Ameteur Radio Hall of Fame and was a member of the First-Class CWOperators Club (FOC), the Old Old Timer's Club, the Quarter Century Wireless Association (QCWA), and the A-1 Operator Club. In 2002, the QCWAhonored Kahn on his 80th anniversary as an ameteur licensee. He also received an Army/Nevy "E" Award in 1945 for supplying the War Department with thousands of microphones during World War II. The Boy Scouts of America presented Kahn with its Silver Beaver Award for staffing Ameteur Radio stations at international scout jamborees.



Al Kahn, K4FW, died June 15, 2005 at the age of 98. Kahn remained a member of the Ten-Tec Board of Directors until his death. Kahn's daughter, Carol Bleneman, said her father had continued his regular CW schedules with his old friends until just a fewdays before he died.

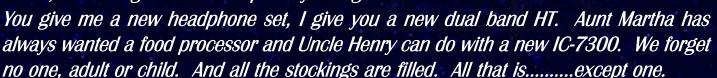
## And finally for this month's Christmas issue......

I would like to share with you an excerpt from the 1947 motion picture "The Bishop's Wife" starring Cary Grant, David Niven, and Loretta Young (somewhat modified to ham radio style):

# The Empty Stocking

Tonight, I want to tell you the story of an empty stocking:

Once upon a midnight clear, there was a child's cry, a blazing star hung over a stable, and wise men came with birthday gifts. We haven't forgotten that night down through the centuries. We celebrate it with stars on Christmas trees, with the sound of bells, with carols, and with gifts......but especially with gifts.



And we have even forgotten to hang it up. The stocking for the child born in a manger. It's His birthday we're celebrating, you know. Let us never forget that.

Let us ask ourselves what He would wish for most. And then let each put in his share - lovingkindness, warm hearts, and a stretched-out hand of tolerance. All the shining gifts that make peace on earth.

Have a Merry Christmas and a blessed and prosperous 2019 -

Don - K5DB, Editor

THE SIGNAL newsletter is published monthly for members of the Bella Vista Radio Club. BVRC disclaims any responsibility for the accuracy or the content of articles published herein. The opinions expressed are solely those of the authors. BVRC neither necessarily endorses nor opposes said opinions, brand names, products, businesses, organizations, etc. Submission of any amateur radio related articles is encouraged and welcomed. Submit your article to the editor: Don Banta-K5DB, 3407 Diana St., Springdale, AR 72764 (or E-mail to: <a href="mailto:arsk5db@gmail.com">arsk5db@gmail.com</a>) for publication in THE SIGNAL. The deadline for articles is the 10th of each month.