

The Static

An evolving publication of the Hill
Country Amateur Radio Club



...and now a word from the prez.

I know by the time you read this it will be late February but these are the thoughts that are going through my head on this, the 10th of February. The heart beat of HCARC comes to mind today. As I see it, this heart beat is very strong and getting stronger.

Do you realize how many folks are becoming interested in the activities at the N5HR station? If you are not aware, N5HR station is our bit of real estate at the Red Cross office on Earl Garret. The logging program work that is taking place will be of great benefit during Field Day activities. Gale, KM4DR, is heading up some sessions that take place during different contests. They are making some great contacts. These are the types of activities that are at the "heart beat" of HCARC.

New hams are "stepping out on a limb" to try their equipment in many different ways. Terry, KF5NHK, participated in a 24 hours event. He used this opportunity to discover new and different things about his radio.

Let's don't forget those who have been hams for a long time. Even though Al, N7ADU, doesn't drive now, he is still able to go to Wednesday coffee. Harvey, K5HV, provides the transportation so he can be involved. Along with the long time hams is Mitch, W9OEG. He showed up on the Monday night net Feb.6. Some of those who have been in the club for a long time, such as Neil, W9CNC, were really pleased to hear him on the air. Harvey, K5HV, took a 2 meter antenna over so Mitch could be a little more successful on the air. Scott, N9BMR, took a radio over to Fredericksburg to Hollis, KE5JUU, so the recovery time from the stroke could move along with a little radio activity.

What are you doing to keep the "heart" of HCARC beating good and strong? If you need something to help you be more involved just speak up and there is always a place for another Heart Beat. It's great to be involved with these types of folks. I know I have missed some that are doing great things such as the Field Day committee and the Club Ed. Folks. There will be more about them at another time.

73 to all,

Marilyn KE5DDR

Field Day Update

CQ CQ CQ Field Day CQ CQ CQ

One step closer and well on our way to a great Field Day. Dr. Jim has secured the Race Track in Fredericksburg for our field day site this year. The paper work is in order and now the hard part is over.

In the coming months we will be sending out invitations to local news papers, politicians and emergency coordinators. I have not received any input from our members as to a local paper or official that we need to contact so please don't wait till the last minute to send an email my way with this important info. Here is the address just in case you have misplaced your club roster. jnblavender@hctc.net

The next few decisions will be as to what class we will be working either 2A or 3A either way we will have a GOTA station along with a VHF station. I am looking forward to the GOTA station contributing a great deal of points towards our total score. Each GOTA station operator will need to make 20 contacts at a minimum. Then each 20 contacts after that in groups of 20 to a total of 100 contacts are worth extra bonus points. We will also get extra points for each operator under the age of 18 that operates the station and makes a contact. Here is another ditty if we have a Coach we can double our points, and that's just one station. The point totals are 2 for 1 on the Digital and CW stations while the Voice Station is 1 for 1.

Gale has been putting on the reflector and sending out emails in ref to working with folks at the club's station and using the N1MM logging program. I went

down for a training session and it was more fun than training. The logging program is really user friendly and makes recording the contacts very simple. With the click of a few buttons and Poof the logging is done. Time to get the next contact. 15 or 20 minutes later you are not even aware that you have made 20 or so contacts. Before you know it you are working the station like a pro. Its sparked a few smiles from some folks when they find out how easy it really is. I encourage you to take a few minutes out of your day and sneak down to the club station for some of the digital contests that we have coming up and work a few contacts. You don't have to be worried about making mistakes, and you will have a lot of fun operating and learning at the same time. The antenna work and new antenna is surprisingly a great combination for the location. It has allowed us to make some good DX contacts as well as all over the USA. We were treated to a very pleasant surprise while we were learning and having fun, I have to say the cookies from our president were really good.

I am looking forward to a great event.

Jeff N4YPT

Here comes da sun...

Solar Dynamics Observatory Helps Measure Magnetic Fields On the Sun's Surface

ScienceDaily (Jan. 18, 2012) — A subset of data that helps map out the sun's magnetic fields was recently released from the Solar Dynamics Observatory (SDO). Observations that measure the

strength and direction of magnetic fields on the solar surface -- known as vector magnetograms -- play a crucial role in understanding how those fields change over time and trigger giant eruptions off the surface of the sun such as solar flares and coronal mass ejections (CMEs).

Collecting the information needed to make vector magnetograms is one of several tasks performed by SDO's Helioseismic and Magnetic Imager (HMI), an instrument led by a team at Stanford University. HMI has been collecting data since May of 2010, providing scientific data on the strength of the sun's magnetic field and the sound waves moving around inside the Sun.

HMI relies on interpreting the way light is affected as it travels through the fields in order to measure them from afar. For example, a phenomenon known as the Zeeman effect splits light into different wavelengths based on the magnetic field strength and, in addition, light may be polarized based on the magnetic field direction. HMI uses these observations to produce vector magnetograms. Producing vector magnetograms at HMI's high resolution, however, required developing new computer processing techniques to successfully interpret subtle details about the magnetic field. In early December, the HMI team released their vector magnetograms for one area of the sun, named Active Region 11158, collected during February 12-16, 2011. As a larger group of researchers examines the new data, the team can refine their computer processing algorithms if necessary and then release all the vector magnetic field data that HMI has collected.

For more information about the Solar Dynamics Observatory, visit: <http://www.nasa.gov/sdo>

The latest solar forecast and what it means is at the site below. It's a little technical and long. It doesn't look good. <http://solarscience.msfc.nasa.gov/predict.shtml>

Weather sites

Thanks to Curtis Eastwood for the following internet sites concerning weather.

<http://www.srh.noaa.gov/jetstream/>

This site has a number of lessons on weather and weather related topics.

<http://www.srh.noaa.gov/ewx/>

This site provides forecasts for our area.

Radio sites

<http://www.sm3cer.com> Gives information on contests. Thanks to Gale Heise for this tip.

<http://www.dxsummit.fi/DxSpots.aspx>

Gives you up to the minute DX spots.

Be sure to check out who made the posting. If it was a person posting from some far off corner of the earth it may not do you any good. Look for postings from nearby hams. The same type information can be found at

<http://www.dxwatch.com/> in slightly

different format.

If you are interested in finding some nets to check in with be sure to go here:

<http://www.ac6v.com/nets.htm>

For the new hams here are some sites you'll want to check out.

www.qrz.com

www.eham.net

www.hamuniverse.com

I REMEMBER BILLY

By Jack McKenzie N5MFG

His name was Billy Smith and we grew up in the sleepy little town of Mesquite, Texas. We did all the kid stuff and one time we decided that we would learn Morse Code. Billy built an oscillator and put it inside a wooden Brown Mule tobacco box. I furnished a Western Union telegraph key that I have to this day displayed on the wall of my Ham Shack. We never did learn Morse Code as our interests went on to spray painting bicycles with air pressure from an auto intertube. I don't know how many trips we made to the service station to get more air.

After high school we both went on to Texas A & M College. This was during World War II and we both volunteered for Aviation Cadet training in the Army Air Corps. We entered service the same day at Shepherd Field, Texas where we were assigned to different barracks according to our last name. When we left basic training Billy went to Aviation Cadet Pre Flight at San Antonio, Texas

whereas I was sent to Pre Flight at Maxwell Field, Alabama. I never saw him again.

In Pre Flight we both had to learn to copy 5 words per minute Morse Code.

I didhe didn't.

After Pre Flight I went on to Primary Flight School, followed by Basic Flight School and Advanced Flight School where I received my Commission and Silver Pilots Wings. I then went to the Four Engine School back at Maxwell Field where I learned to fly B-24 bombers which was followed by crew training and eventually to the 735th Squadron of the 453rd Bomb Group (Heavy) of the 8th Air Force in England where I flew missions over Germany.

In the meantime Billy repeated another two months of Pre Flight where by this time he had learned to copy Morse Code at 20 words per minute or so. And then, for reasons that would only be understood by someone who has served in the military, he did not ship out again and was held back for another onerous two months of Pre Flight! By this time the need for pilots had declined and as soon as he got to Primary Flight School he washed out. He was sent, where else, to Radio School.

Radio School took a long time and then he was assigned to a B-29 crew where crew training took a long time to the end that his crew did not make it to the Pacific Theatre of Operations until the

war was nearly over.

On V-J Day all combat crews were stood down and further missions were flown by crews like Billy's who had not been in combat. His crew was assigned a low-level mission to drop food parcels to American prisoners of war camps in Japan, a mission for which they were not trained. They flew into a mountain and Billy was killed along with his entire crew except for one.

Thus Billy died the day AFTER the war was over, and all because of Morse Code back in our Pre Flight days.

Thanks, Jack, for this story

What's next?

Spray-on antenna: Wireless in a can

by [Amanda Kooser](#) February 13, 2012 3:17 PM PST



The antenna can, seen next to a closeup of the nano material.

(Credit: Video screenshot by Amanda Kooser/CNET)

It sounds like a particularly suspicious late-night infomercial: Spray your way to a better wireless signal! Improve your range! Save battery! Transmit over great distances under water!

But [Chamtech's spray-on antenna](#) is a real product with some impressive claims. It can be sprayed on almost any surface, even trees and orange barrels. It doesn't suck up power. It works in a mysterious nanotech way.



This fuzzy image shows the first test of the spray antenna with the material applied to a tree.

Here's how I imagine the antenna process goes:

Step 1: Spray antenna material on surface.

Step 2: Connect phone to material.

Step 3: ????

Step 4: Make a phone call to the moon. Chamtech co-founder Anthony Sutura imagines a world where wireless antenna towers are replaced with nanopaint on walls, and issues like [iPhone Antennagate](#) are a thing of the past.

"We have come up with a material that when you spray it on, it lays out just in the right pattern and all of these little capacitors charge and discharge extremely quickly in real time and they don't create any heat," Sutura says in a video presentation about the product.

One of Chamtech's tests turned an RFID chip with a 5-foot range into an RFID chip with a 700-foot range. The company lists a spray antenna kit on its site, but pricing for the public is not revealed. The U.S. government is reportedly already playing with the new material.

If all these claims bear out, then I can see everybody wanting to get their hands on a fresh can full of antenna. My only question is where in the grocery

store it will be stocked: with the spray cheese or with the [gold food paint](#)?

This really does sound like an article more fitting for the April issue but that is just as I found it on CNET. Hey, if this works out stealth antennas will be as easy as graffiti. But in the meantime, if you are looking for sources for antennas, either to buy or how to build them, check out the following site.

<http://www.dxzone.com/catalog/Antennas/>

New Ham upgrades

Congratulations to Calvin Noble for upgrading to General from Tech in the last VE session and Alan Cone upgraded from Tech to Extra. Way to go gents.

Meet the members – N7ADU, Al Taylor

In August of 1911 Howard Taft was President of the United States and vetoed the admission of Arizona and New Mexico to the then 46 state union. The GMC logo was registered for the first time and a woman was awarded a pilot's license for the first time. Lucille Ball was born in New York. Edgar Rice Burroughs, of Tarzan fame, submitted his first manuscript of a six part series on a Martian fantasy to Argosy magazine. Harry Atwood took off from St. Louis, Missouri and landed in New York city after a flight of 1,365 miles, 20 stops and 28 ½ hours. On August 12, in east Texas, near Jacksonville, Al Taylor was born.

He grew up in the area and as a Boy Scout learned the Morse code using a signal flag – a wave to one side as a dit and the other as a dah. He was always interested in electronics even in early years. In 1930 he made a 120 mile trip over gravel roads to Dallas to take the Amateur Radio Operator exam. He did not know if he had passed or not but the examiner told him, "We'll let you know." About three weeks later Al received notification that he was now W5ANU.

Al built his first rig with the help of a friend's junk box and coils he wound from ¼" copper tubing using an oatmeal box as a form. He ended up with a Hartley oscillator and a receiver that used two 201A tubes. He scored the Bakelite bases of the tubes with a hack saw to keep them from arcing. Ceramic tube bases had not been invented. From 1931 to 1935 Al operated CW with his home built rig on 40 meters and worked a number of DX stations including South Africa, Mexico and Spain. His first contact was with a ham in Weatherford, Texas and shortly thereafter worked a station in Kansas. He was on the way. In those days hams worked an early version of "split." Al would send a CQ on the only frequency his rig would send then tune across the band to see who might be calling him. It was a slow process.

During those early years of ham radio Al worked a number of jobs in east Texas and the surrounding area. For a while he worked the night shift in an ice plant that supplied ice to the Texas oil fields.

The first time he tried to upend a 300 pound block of ice - it fell and he lost all his toe nails. He learned there was a trick to it and never made the mistake again. A friend told him about a job as a radio operator on a Mississippi River dredge so he went to Vicksburg and signed on as the radio operator and assistant steward with the US Army Corps of Engineers. Later he went to work on a seismic crew for Shell Oil making shots in the Atchafalya basin. Some of the shots used 2,000 pounds of dynamite as they searched for salt dome structures. Once one of the crew members captured a small alligator and not knowing what to do with it put it in the bathtub of the dormitory where the crew was staying in Baton Rouge. When they came in from the field all their belongings were out in the driveway and the door was locked. Al's work on the seismic crews took him from Louisiana to New Mexico and back to Houston where he ended up in the Shell Oil Laboratories. During WWII Al was classified as a military worker. Al and his coworkers worked on a project to get bombs to explode a certain distance above. The advent of the proximity fuse rendered all of their work obsolete. Progress marches on. Al retired as the Lab superintendent in 1971.

Al and his wife, Lena, did not want to spend their retirement in Houston so headed for points west. They liked Kerrville but Lena found the cedar pollen intolerable. About that time they got a promotion package for a three day two

night introductory stay at a retirement community near Phoenix, Arizona so they hitched up their 25' Winnebago trailer and headed west. About three thirty one afternoon they found themselves in Safford, Arizona and no campgrounds within comfortable driving distance so, they found a small RV park and stayed for a couple of days. They went on to Phoenix and completed their stay but did not find the heat and hustle of Phoenix to their liking and went back to Safford. They stayed a few days, looked around, bought a lot and headed back to Houston. They arranged to have a home built, sold their home in Houston, hitched up the travel trailer again and headed back to Safford. Al took a minimum wage job with the contractor building his new home and did all the electrical work on his soon to be home.

Al had given up amateur radio in 1935 because slogging around in the swamps and bouncing along seismic trails just was not conducive to the hobby. At the time license renewal depended on having remained active in the hobby and showing proof of having made a certain number of contacts. Al let his license expire. In retirement, Al once again found time on his hands and Lena suggested he re-connect with ham radio. Borrowing some materials from a new found friend in Safford, he studied up, re-tested and earned his Advanced Class license. He bought his first commercial rig, a Kenwood TS 520. Coupled with a Henry 2KD Classic amplifier and a Thunderbird TH6DX

antenna atop a 50 foot tower Al immersed himself in the hobby. He liked to ragchew and was instrumental in forming several nets, most notably the Brown Sugar (BS) net that was active over a broad area including the Pacific Ocean. He climbed his tower to change the antenna to a TH7DX for the last time when he was 75 years old.

After a long marriage, Lena passed away in 1995 in Safford, Arizona. Al's three children encouraged him to move back to Texas. He relented and moved back to Kerrville where he has been since. Al now has an apartment overlooking the Guadalupe River on the third floor of Plaza on the River. While he is no longer active on the HF bands, Al has a 2 meter rig in his apartment along with a Ringo Ranger antenna and is a regular on the Monday night FM net.

1911. That was the year the US Army adopted the .45 caliber semiautomatic pistol as the official handgun of the Army. They made one revision. That was also the year of Al Taylor – no revisions necessary. Yup, 1911 was a very good year.

That's it for this issue. If you have suggestions or comments, please e-mail them to:

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