

**The Central Texas Amateur Radio Club  
meets the first Tuesday of each month at 7:00 PM at the  
Bell County Communications Center, 708 West Avenue O, in Belton**

**DE the VP...**  
*Rick Murray, K6WXA*



It's a new year, and a time for new ideas and going in new directions. Our newly elected president, Terry Evans-KF5OHR, has graciously granted me what would be his space here for passing along some ideas of mine own.

At the top of the list, I think the club should pursue fostering relations with the Copperas Cove Repeater Association-K5CRA, for two good reasons. One, they're a good bunch of people. And two, geographically speaking, they're right next door. One of the first things we could pursue is to drop in on one of their weekly nets; they meet on the air each Tuesday evening at 7:00 PM on 147.260(+) PL 88.5, on the K5CRA repeater. On the second Tuesday of every month, they can be found at the same time on their UHF repeater on 443.325(+) which also has a tone of 88.5 for their swap-net. Take the time to just drop-in and say "Hi". They also meet the first Saturday of each month at 9:00 AM, for a breakfast get-together at the "Lil Tex" Restaurant, located at 502 South Main Street in Copperas Cove.

Number next... Every radio club has a principal thrust or interest. For us, it's severe weather and storm spotting. I believe the club should pursue establishing relations with the U.S. Air Force's 3rd Weather Squadron on Fort Hood. I've already taken the first step in this endeavor by contacting Master Sergeant Scott Jennings - their Operations Superintendent. He's currently on holiday leave, but after his return, myself and Budd Johnson-WB4J, the ARES Assistant EC for Coryell County, are going to have an informal meeting with him to discuss ideas and bounce around some ideas. An initial thought is to have their representatives perhaps give a program at one of our meetings. I have several other ideas in this endeavor, but they're really too lengthy to type out here. I hope as many of you as possible can attend our next meeting where we can talk about it at length.

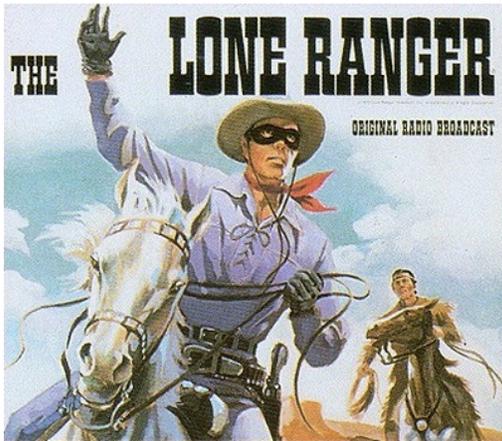
And then for the rest of us... January is the time of year when club dues are due. Please make a point to assist me in busy-ing our club treasurer with your contributions.

Until then, our next club meeting is Tuesday, January 5th at 7:00 PM at the Bell County Communications Center. I sincerely hope to see you all there, and I want to wish all of you the Happiest of New Year's.





"A fiery horse with the speed of light, a cloud of dust and a hearty "Hi-yo Silver" - the Lone Ranger! With his faithful Indian companion, Tonto, the daring and resourceful masked rider of the plains led the fight for law and order in the early West."



With the stirring notes of the *William Tell Overture* and a shout of "Hi-yo, Silver! Away!" *The Lone Ranger* debuted over radio station WXYZ in Detroit, January 30th, 1933 and aired through September 3rd, 1954, featuring the adventures of a mysterious masked man who traveled The Wild West with his faithful companion Tonto and his famous white horse Silver, righting wrongs as they went.

The "masked rider of the plains" became one of the most popular and enduring western heroes of the 20th century who sallied forth to do battle with evil western outlaws and Indians, generally arriving on the scene just in time to save an innocent golden-haired child or sun-bonneted farm wife.

Return with us now to those thrilling days of yesteryear. The Lone Ranger rides again! Visit: [https://archive.org/details/The\\_Lone\\_Ranger\\_Page\\_01](https://archive.org/details/The_Lone_Ranger_Page_01)



The Central Texas Amateur Radio Net meets every Thursday at 8:00 PM on the N5ZXJ repeater, on 145.310(-) PL 123.0 Join Us!

### January NCS & Back-Up NCS Schedule

January 7th:	January 14th:
Net Control: AD5SK	KG6FUJ
Back-Up: KG6FUJ	W5GNK

January 21st:	January 28th:
Net Control: W5GNK	KF5OHR
Back-Up: KF5OHR	KE5ISN



### Straight Key Night

Straight Key Night is held on January 1st from 0001 - 2359 UTC on all authorized amateur frequencies. For more information on this event, visit: <http://www.arrl.org/straightkeynight>



### ARRL Membership Dues Increase

During the July 17-19 meeting of the ARRL Board of Directors, the board approved a \$10 increase in the League's annual dues rate, **effective January 1st**. ARRL basic dues have been held at \$39 a year since 2001.

ARRL CEO David Sumner - K1ZZ, said the League has done as much as it can to hold off a dues increase for more than a decade, but now it's a necessity, not an option. "ARRL manages its resources judiciously and keeps costs as low as possible while trying to maintain a consistently high level of service for all members. Raising dues will ensure that high-quality programs and services will continue for all members as we provide a unified voice that protects and promotes *all* of Amateur Radio."



## Village of Salado '3 Kings 3 Miler'

The Village of Salado is holding a 5K run dubbed, the '3 Kings 3 Miler' on Saturday, January 2nd. The run will start at 8:00 AM at St. Joseph's Church and then continue on along Main Street. Racers will have the entire, historic, delightful, and beautiful Salado Main Street all to themselves as they race. Once complete, there will be music, awards, coffee, and a hot chocolate bar for all! Five or six amateur radio operators are needed to provide logistical support communications along the run's route.

If you'd like to help out, please contact Robert Shoemaker-KE5WVC, at (254) 702-8066 or via email at:

[robert1867@embarqmail.com](mailto:robert1867@embarqmail.com) For more information on the event itself, visit: <https://runsignup.com/race/tx/salado/3kings3miler>



## Kid's Day

Twice a year, in January and June, the ARRL offers an event designed to promote Amateur Radio to our youth. Kids Day is designed to give on-the-air experience to youngsters and hopefully foster interest in getting a license of their own. It is also intended to give older hams a chance to share their station and love for Amateur Radio with their children. This month's event is on Sunday, January 3rd, from 1800-2359 UTC. For more information on this please visit: <http://www.arrl.org/kids-day>

"If it weren't for Philo T. Farnsworth, inventor of the television, we'd all still be eating frozen radio dinners." - *Johnny Carson*



## ARRL North Texas Section Convention

*Cowtown Hamfest*, the original Hamfest in the Fort Worth Metroplex, is Friday, January 15 from 3 PM to 7 PM and Saturday, January 16, 7 AM to 3 PM. The convention will be held at the Forest Hill Civic and Convention Center 6901 Wichita Street in Forest Hill. Talk-In frequency is 147.280(+) PL 110.9 and call for W5SJZ or K5COW.

For more information on this, visit: <http://www.cowtownhamfest.com> or you can also contact them via email at: [info@cowtownhamfest.com](mailto:info@cowtownhamfest.com)



## North American QSO Party

Contest period is from 1800Z, Jan. 16th to 0600Z, Jan. 17th on 160, 80, 40, 20, 15 and 10 Meters. Complete rules and further information can be found at: <http://www.ncjweb.com/naqprules.php>



## January VHF Contest

Contest period is 1900Z, Jan. 30th through 0359Z, Feb. 1st on 6, 2, 1.25 Meters and 70 Cm. For more info visit: <http://www.arrl.org/january-vhf>



## Winter Field Day

Sponsored by the WFDA, Winter Field Day is much like ARRL's Field Day summer event, but focuses on operating in less than ideal conditions during the winter months, in the event of an emergency. The event falls on January 30th-31st. More information on this event is at: [www.winterfieldday.com](http://www.winterfieldday.com)



## Skywarn Training



**Burnet County** (*Basic Spotter Training*) Thursday, January 28th, 6:30 - 8:30 PM, at the Burnet Community Center, 401 East Jackson St., in Burnet.

**Coryell County** (*Basic Spotter Training*) Thursday, January 28<sup>th</sup>, 7:00 - 9:00 PM, at the Copperas Cove Police Department Community Room, 302 East Avenue E in Copperas Cove.

**Erath County** (*Basic Spotter Training*) Thursday, January 21<sup>st</sup>, 6:30 - 8:30 PM, in the Science Building, Room 102, at Tarleton State University, 1333 West Washington St., in Stephenville.

**Falls County** (*Basic Spotter Training*) Monday, January 4<sup>th</sup>, 7:00 - 9:00 PM, at the Falls County Courthouse, 125 Bridge St., in Marlin.

**Limestone County** (*Basic Spotter Training*) Thursday, January 7<sup>th</sup>, 7:00 - 9:00 PM, at the Limestone County Courthouse, 200 West State St., in Groesbeck.

**Milam County** (*Basic Spotter Training*) Monday, January 25<sup>th</sup>, 7:00 - 9:00 PM, at the Cameron VFD, 1505 North Travis St., in Cameron.

**Robertson County** (*Basic Spotter Training*) Monday, January 11<sup>th</sup>, 7:00 to 9:00 PM at Annex 2, in the Great Room, 3<sup>rd</sup> Floor, 155 North Cass St., in Centerville.

**Travis County** (*Basic & Advanced Training*) Saturday, January 16th, 8:15 AM to 4:15 PM, at the ACC / Eastview Campus, 3401 Webberville Road in Austin. More information on this is at: <http://www.utexas.edu/depts/grg/kimmel/skywarn.html>

**Williamson County** (*Basic Spotter Training*) Wednesday, January 21st, 6:30 - 8:30 PM, at the Baca Center, 301 West Bagdad Ave., in Round Rock.



無線電報

The above script is the word for 'radio' in Chinese. Pronounced *wu-shien-dien-bao* with its literal translation meaning "without wires electrical message." (from "Radio Amateur News" - January, 1920)

### FROM THE EDITOR'S DESK



I normally like to send out the newsletter at least a couple of days prior to what would be the next club meeting or the first of the coming month. However, with what will be the **February** issue of the *Wavelength*, I won't be sending out the February issue of our newsletter until the late morning of February 2nd.

### Birth of Public Broadcasting

On January 13, 1910, the first public radio broadcast was an experimental transmission from the Metropolitan Opera House in New York City with a performance of several famous opera singers.

The experiment was considered mostly unsuccessful. The microphones of the day were of poor quality and couldn't pick up most of the singing done on stage. The New York Times reported the next day that static and interference "kept the homeless song waves from finding themselves".



DL7VOA will be active from Efate Island, Vanuatu, through the 13th of January as **YJ4AO**. QSL via his home call.

**DDØVR** will be active from Namibia through the 10th of January, signing **stroke V5** or **V5ØVR**. QSL via his home call.

GW4DVB will be active from Antigua Island 6 - 14 January as **V25GB**. QSL via his home call.

A group of amateurs will be active from South Georgia Island January 14th to an unspecified date as **VP8SGI**. QSL via KU9C.

JH7IPR will be active from Koror Island, Palau 7 - 14 January as **T88UW**. QSL via home call.

A group of amateurs will be active from the Falkland Islands starting 9 - 16 January as **VP8IDX**. QSL via N2OO.

The same group will then be active from the South Sandwich Islands 17 - 27 January as **VP8STI**. QSL via N2OO.

A group of amateurs will be active from Palmyra Atoll 11 - 26 January as **K5P**. QSL to: Palmyra DXpedition, PO Box 73, Elmwood, IL, 61529.

A group will be active 7-11 January from Antipodes Island as **ZL9A**. QSL via VE3LYC.

GØUIH is planning to be active from Dirk Hartog Island 10 - 17 January as **VK2IAY/6**. QSL via his home call.

**DDØVR** will be active from Lesotho as **7P8VR**, 4 - 7 January. QSL via his home call.

**VA1AXC** will be active from Sable Island until the end of January signing **stroke CYØ**. QSL via JE1LET.

**E51WET** will be active from Aitutaki Atoll through the 4th of January, then from Rarotonga Island through the 9th of January. QSL via SM6WET.

A group will be active from Sagar Island 9 - 16 January as **8T5GSM**. QSL via VU2NRO.

The South Texas Amateur Radio Club will operate special event station **K5D**, 15-18 January to commemorate hams who have passed away and are not forgotten. QSL via KF5UPC.

EA3BT and EA3WL will be active from Sri Lanka 3 - 8 January as **4S7JTO** and **4S7NTS**. QSL via EA3BT.

WW4LL will be active from Grand Cayman Island through the 5th of January as **ZF2LL**. QSL via his home call.

K4ZW will be active from Laos 15 - 24 January as **XW4ZW**. QSL via K1SE.

HB9MFM will be active from Dominica Island until January 30th as **J79WTA**. QSL via his home call.

F6BLP will be active from Senegal 5 - 31 January as **6W7SK**. QSL via LotW or his home call.

K8PGJ will be active from Grand Cayman Island 9-17 January as **ZF2PG**. QSL via LotW or his home call.

**WJ2O** will be active from Panama 7 - 12 January, signing **stroke HP3**. QSL via N2ZN.

A group will be active as **ZL9A** from the Auckland and Campbell Islands 7-11 January. QSL via VE3LYC.

VK4AFU will be active from Vanuatu 2-10 January as **YJØAFU**. QSL via LotW or via NA5U.

OZ6TL will be active from Rarotonga Island in the South Cook Islands, until the 9th of January as **E51TLA**. QSL via his home call.

JR2GAG will be active from Kosrae Island 1 - 8 January as **V63GG**. QSL via his home call.

Special Event Station **K7B** will be on the air January 14 - 19 for the Lake Havasu Balloon Fest. QSL via K9WZB.

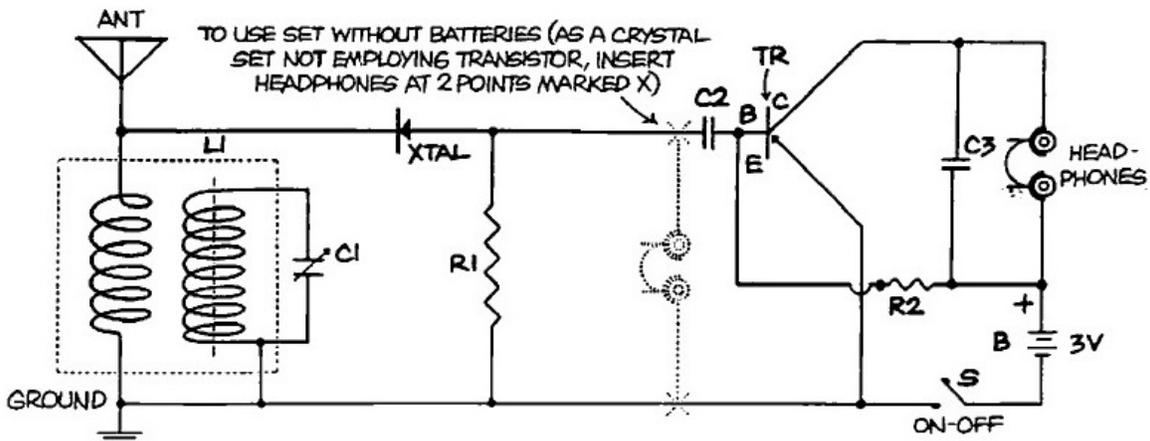
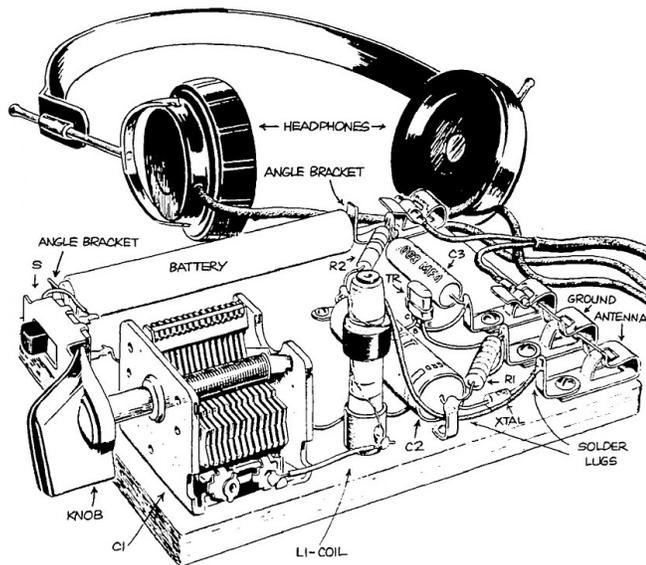
# Build this CONELRAD Radio to Be Prepared

*Boys' Life* - January, 1956

**CONELRAD** (*Control of Electromagnetic Radiation*) was a method of emergency broadcasting to the public of the United States in the event of enemy attack during the Cold War, and was established by President Harry S. Truman in 1951. It was intended to allow continuous broadcast of civil defense information to the public using radio or TV stations, while rapidly switching the transmitter stations to make the broadcasts unsuitable for Soviet bombers that might attempt to home in on the signals as beacons by pilots of bombers.

In the event of an emergency, all United States television and FM radio stations were required to stop broadcasting. Upon alert, most AM medium-wave stations shut down. The stations that stayed on the air would transmit on either 640 or 1240 kHz. They would transmit for several minutes and then go off the air, and another station would take over on the same frequency in a "round robin" chain. This was to confuse enemy aircraft who might be navigating using radio direction finding.

Although the system by which the CONELRAD process was initiated (switching the transmitter on and off) was simple, it was prone to numerous false alarms, especially during lightning storms. Transmitters could be damaged by the quick cycling. The switching later became known informally as the "EBS Stress Test" (due to many transmitters failing during tests) and was eventually discontinued when broadcast technology advanced enough to make it unnecessary.



Beginning in January 1957, U.S. amateur radio came under CONELRAD rules and amateur stations were required to monitor their local AM radio station while they were on the air. If their local AM radio station suddenly went off the air, amateur radio operators were required to stop transmitting and ascertain if a national emergency had occurred.

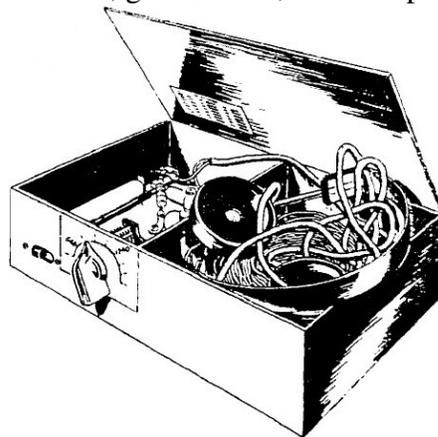
## PARTS LIST

- C1- 365 MMF. MINIATURE  
VARIABLE CONDENSER
- C2- ONE .1 MF. 200 V.  
PAPER CONDENSER
- C3- ONE .003 MFD. 200V.  
PAPER CONDENSER  
ONE KNOB TO FIT  
VARIABLE CONDENSER
- L1- ONE TUNING COIL, MEISSNER  
"MICRO-LOOP"
- TR- ONE TRANSISTOR, NPN TYPE  
SYLVANIA 2N35 OR G.E. 2N170
- S- ONE SPST SLIDE SWITCH
- R1- ONE 15,000 OHM 1/2 W.  
CARBON RESISTOR
- R2- ONE 250,000 OHM 1/2 W.  
CARBON RESISTOR
- XTAL- ONE CRYSTAL DETECTOR,  
RAYTHEON CK706A  
ONE PAIR DOUBLE HEAD-  
PHONES, 2000 OHM
- B- TWO SLIM PENCILS,  
EVEREADY NO. 912  
SEVEN SOLDER LUGS  
SEVEN 3/8" ROUND-HEAD  
WOOD SCREWS  
TWO ANGLE BRACKETS TO  
CONTACT BATTERY
- CONNECTION WIRE, INSULATING TUBING,  
ANTENNA AND GROUND WIRE, NUTS  
AND BOLTS TO MOUNT CONDENSER  
AND SWITCH, #30 ENAMELLED WIRE.

In the mid-1950's, a transistor radio was an expensive luxury. This presented a problem for an impecunious Boy Scout who wanted to 'Be Prepared' for anything. In the words of Boys' Life magazine for January 1956, "in case of enemy attack, it is assumed that power lines will be down, and battery-operated radios would be a necessity. But batteries wear out. So what you need for *Conelrad* service is a receiver that doesn't use batteries, yet will produce a usable signal when needed."

The article pointed out that a crystal set might be pressed into service, but wouldn't produce very loud signals. This one transistor set was well within the construction abilities and budget of a Scout. The set shown here would run on two penlight cells with clear headphone volume for well over a thousand hours. And, in a dire emergency, since the set consisted of a crystal detector with a one-transistor audio amplifier, the schematic diagram shows how to bypass the amplifier and simply use it as a crystal set with reduced volume.

The set is built on a board, and mounted in a cigar box, which provides ample room for storing the antenna wire, ground lead, and headphones.



After the development of intercontinental ballistic missiles reduced the likelihood of a bomber attack, CONELRAD was done away with in 1963.



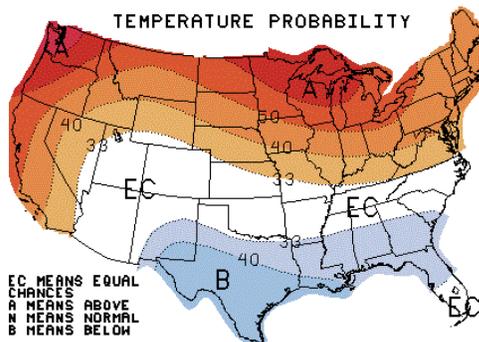
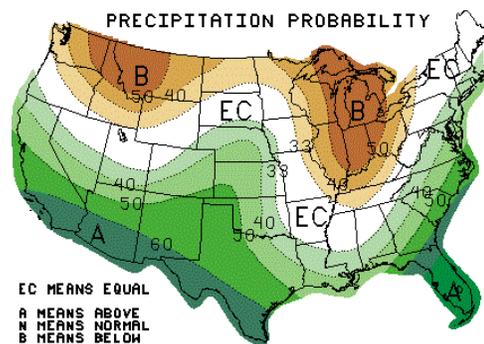


# Winter Forecast Outlook

The pattern across North America varies throughout the cold season, but with the strong El Niño conditions in place, a persistent jet stream will tend to dominate the southern tier of states. The result is periodic precipitation events that will track across Texas. This generally means a wetter-than-normal winter for our region, with Central Texas seeing a greater enhancement in precipitation amounts than areas farther north near the Red River.

Although a wetter-than-normal winter might imply more chances for wintry precipitation, the opposite is the case since arctic air is less likely to be available. A typical El Niño winter does not have more days with wintry weather than normal, but the winter weather events that do occur tend to result in greater snowfall amounts. The only winters since 1950 with greater than 10 inches of snowfall for the season in Dallas/Fort Worth were all El Niño winters,

including the near-record snowy winter of 2009-2010. But there have also been El Niño winters without measurable snowfall in the Metroplex, including the strong El Niño of 1991-1992.



The likelihood of a cooler than normal winter increases with El Niño conditions, but this is based on multi-month average temperatures, which can mask important details. It turns out that extreme cold outbreaks are actually *less* likely during El Niño winters, which typically have fewer days with freezing temperatures than normal. The source regions for our cold air intrusions tend to be warmer than normal, and persistent west-to-east flow limits these

intrusions. The increased cloud cover and precipitation reducing daytime temperatures is the primary factor for the cooler than normal temperatures overall.

**Flash Flooding Concerns...** Flash flood events can happen during any season, during a prolonged wet period, subsequent precipitation events have a greater likelihood to result in flooding as saturated soils enhance runoff, particularly during the cold season when limited evaporation can maintain soil moisture long after an event. This effect is accentuated during El Niño winters.



Flooding of reservoirs and main-stem rivers will be a concern. Our spring deluge was mitigated by the fact that many area lakes were very low and could take in a considerable amount of flood water. These same lakes are now full, and the runoff from multiple heavy rain events would likely surge lake levels back into their flood pools.



**Fire Weather Outlook...** Abundant rainfall this fall and the resulting green growth has significantly reduced the threat of wildfires. But as freezing temperatures send warm season vegetation into dormancy, this growth could become fuel for wildfires throughout the cold season. However, the prospects for a wet winter should limit fire weather concerns.

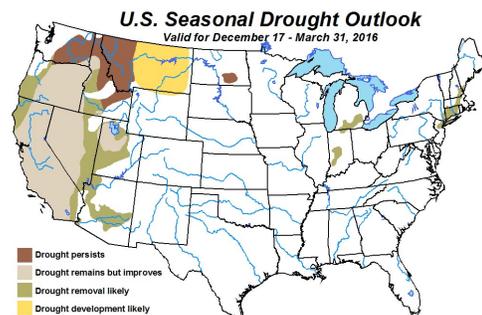
Generally speaking little potential for significant fires exists during the outlook period for the entirety of the United States. Typically fire activity would be occurring in the southeastern U.S. this time of year, however El Niño conditions have brought prevalent moisture to the southern tier and have reduced fire potential to below normal in these areas.

In March, it is likely that some areas of above normal significant fire potential will develop across the central interior of the eastern U.S. This is likely to occur in areas where dryness has become entrenched thanks to moisture pushing further south in El Niño conditions. There is also some concern that developing abundant fine fuel crops across the southern plains may result in early season fires. This concern stems from prevalent moisture during the fall and spring that has likely led to increases in grass crops, which would be a concern for significant fires during and dry and windy periods.

Occasional large fires will occur throughout the U.S. during the period. These fires are difficult to predict but will likely occur in association with any windy and dry periods and some fine fuel component.

Even if a burn ban is not in effect for your area, it is still important to be vigilant about fire usage. Avoid open flames near dry vegetation, and assure all coals and embers are fully extinguished.

**Drought Outlook...** Our region experienced a widespread heavy rainfall with most locations receiving 3 to 6 inches of rain with isolated amounts over 10 inches. This rainfall improved drought conditions from Extreme/Exceptional to Abnormally Dry/Moderate Drought. Lakes and reservoirs saw increases from this widespread rainfall event with rises of 1 to 3 feet.



The latest Crop Moisture Index issued indicated short term moisture conditions were Near Normal to Unusually Moist, and the available soil moisture ranged from 30 to 70 percent of normal across South Central Texas. A continuation of enhanced precipitation totals during the upcoming winter and into the spring of 2016 would likely prevent the drought from returning. Currently only one percent of the state is in Exceptional (D4) Drought.



## The Original Radio 'SANDMAN'

*Radio in the Home - January, 1926*

"...and so the handsome Prince rescued the beautiful Princess and they were married and lived happily ever after." Then comes a soothing lullaby and thousands of listening kiddies prepare for the Land of Nod at the behest and inspiration of the original radio "Sandman," Val McLaughlin, now at station WOAW, owned and operated by the Woodmen of the World Life Insurance Association at its headquarters in Omaha, Neb.

For many years the beautiful voice of the original radio "Sandman" was known to juvenile and adult radio listeners from the well known Davenport WOC, and is now affiliated with WOAW in her former role.

Val McLaughlin is known as "the voice of a thousand smiles" and also "the best known woman's voice in America." Her popularity and the magic of her laughing voice combine to win for her the honor of becoming an exclusive Brunswick recording artist and she records her "Sandman" stories and children's version of bible stories.

Like many others, Val McLaughlin entered the radio field at a time when its possibilities were undreamed of. She first offered her radio "Sandman" stories in 1922 incidental to her other duties as a public entertainer, but soon the demand for her services became so great that in a short time she was devoting her entire time to the "Sandman" work.

She understands children - and she knows that the most attractive element in anything for a child is the element of surprise, and all her stories are full of surprises.



*Val McLaughlin at the mic at station WOAW*

Her voice is not only the "voice of smiles," but of tears; of sudden joy; of depression; of giddy happiness or fear. In fact, she is capable of expressing the gamut of human emotions and conveying it to her listeners just by the mere intonation of her voice. In that respect she is a supreme artist.

Miss McLaughlin's specialty is the entertainment of children, but this is by no means the field to which she is confined. Among the thousands of letters which she has received from her radio listeners, a great portion are from grateful adults who enjoy her work.

In evidence of her immense popularity, many gifts have been received by her as a direct evidence of the appreciation which her audience holds for her unique and inspiring entertainment. She has received as many as twenty-two boxes of candy in one week and stacks of mail pour into the studio of WOAW testifying to her popularity.

## So That Another Might Live

Standing at the lower end of Battery Park, where the tip end of New York looks out toward the remorseless ocean stands a memorial fountain to wireless operators lost at sea. The monument was dedicated on May 12th, 1915, and bore the names of ten young wireless operators who, in the midst of storm and terror, stuck to their post of duty and went down with their ships.



One of those was Ferdinand J. Kuehn, the wireless operator of the *S.S. Monroe*, a 366 foot passenger steam ship which ran over-night service between New York and Virginia. The ship was built between 1902 and 1903 and was owned by the 'Old Dominion Line Steamship Company.'

Kuehn, who was twenty years old, was highly esteemed in the Marconi service. He became interested in electro-mechanics while a high school student in the Bronx.

Ambitious to become proficient as a wireless telegraph operator, Kuehn entered the telegraph department of the Paine Uptown Business School. After his graduation from there in 1911, he obtained employment as a commercial operator aboard the steamship *Denver*, then later the *Jefferson*. When the *Jefferson* was placed in dry dock for repairs, he was transferred to the *Monroe*. This would be his second and final voyage aboard the *Monroe*.

On the morning of January 30<sup>th</sup>, 1914, at about 2:00 AM, the *Monroe* was bound for New York in a heavy fog just off Cape Charles, Virginia. Most of its passengers and crew were fast asleep in their cabins, save those who were kept awake by the snorting sirens that wailed their useless warning through the fog.

Then, through the blanket of fog, came the bow of the south-bound *S.S. Nantucket*. The knife-like edge of the *Nantucket's* bow sliced into the side of the *Monroe*, opening her up to the sea.



So violent was the impact, that the forward mast of the *Nantucket* supporting her aerial, collapsed, rendering the wireless useless. The *Nantucket* then staggered back, releasing the *Monroe*, which then quickly took on water and developed a list making it impossible to launch the four lifeboats on the port side; and of those on the starboard side, number 1 boat was crushed in the collision, number 3 fell into the water and was swamped with only number 5 and number 7 boats that were able to get away cleanly.

Many were trapped below with an account of six trapped in a stateroom when attempted rescue failed. The *Nantucket* sent off lifeboats, which picked up many figures seen struggling in the icy waves. The cries of the frantic survivors guided the rescuers as the fog was so thick that the *Nantucket's* search lights were unable to pierce it.

Several persons spent an hour in the water before they were rescued, owing to the difficulty of seeing them.

Aboard the *Monroe*, Kuehn was at his post in the wireless room, and realizing what had transpired was able to put out an SOS and the ship's location before the dynamo's failed.

He then put on his life jacket and proceeded to his life boat station. Along the way, he came upon a woman without a life jacket. He quickly fastened his to her and assisted her over the side. He was then seen losing his footing as the ship lurched and he fell over the side and into the icy water. There he was seen floating about for a few minutes, and then succumbing to the icy water, he sank beneath the waves.



*The S.S. Monroe*

In the swirling vortex of the sinking ship, men shouted and women screamed through the mist. Many of the unfortunate people crawled out of the portholes as the vessel careened, and sought a foothold on the steamer's slippery side. As the *Monroe* turned on her side, many of the passengers clung along the rails until the vessel carried them down to death.

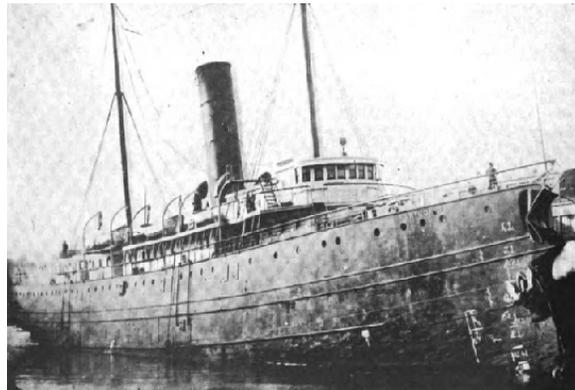
Many were caught in the final roll with people crawling onto the undamaged side of *Monroe* just before she sank. The *Monroe* went down so quickly that there was little time for launching boats. The lost had scarcely a chance to realize that death was on them before they were struggling in the sea. The doomed passengers of the *Monroe*, fast asleep in their cabins when the two vessels came together, went down to death with only time for a shriek of despair. In just twelve minutes after the collision, the *Monroe* turned over and sank.

The *S.S. Nantucket* did not escape undamaged. Her bow was crumpled up and she began to leak in an alarming manner. A temporary patch was put in place and she stood steadfastly by while her searchlight swept the sea in search of the victims of the accident. Not until all hope of effecting rescues was gone did she leave the scene of the disaster.

Several of the rescued passengers taken aboard the *Nantucket*, were clothed only in

their under-garb and were unable to bear the effects of the dulling water, and died on board the *Nantucket* before they reached land.

Forty-nine human lives, twenty-five passengers of the Old Dominion Line steamer *Monroe*, and twenty-four of her crew were claimed by the sea that early morning. And in this time of peril, Ferdinand J. Kuehn, the wireless operator, proved again that those faithful operators could be tried in calamitous extremes and meet the test unflinchingly, and in doing so, distinguished himself prominently in the annals of valor and self-sacrifice.



*The collision damaged S.S. Nantucket*