

**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**

## Terry's Telegram...

Terry Evans, KF5OHR

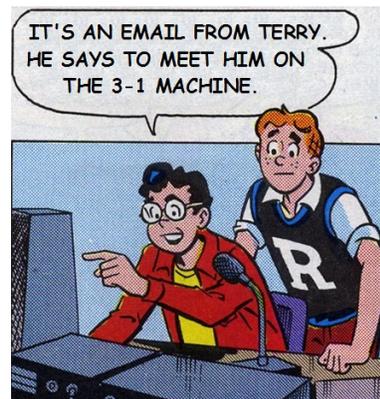
Rick has been talking to both Emery Chandler (KG5HFI) and Toby Driscoll (N5SIM), and word is they are working to put a 6-meter repeater up in the Moffat area. This repeater will also be accessible via linked 2 Meter and 440 base radios. It sounds like they're about 85% completed with the project; however, they need some monetary help from the radio community to finish the repeater. They are asking for \$350-\$400. Rick has invited Toby to attend our next meeting and discuss the repeater. Depending on how the presentation goes, perhaps the club (and/or individuals) could support this project. Robert Cathey (KA5VVD), the President of the Copperas Cove Repeater Association, has also been invited to attend the presentation to see if they would be interested in contributing to this project.

May 11th-12th, Fort Hood will be conducting their "*Phantom Wildfire*" exercise. Although we have members ready and willing to participate in the exercise, what remains unclear is what kind of role we would play, and what traffic we could possibly have over the air which would give us a viable role in the exercise. The current word is that we have been invited by the exercise planners to come and observe. The final planning meeting is May 3<sup>rd</sup> on Fort Hood and both Rick and Budd Johnson (WB4J) will be attending. Rick will be able to give a final update on the exercise at our May 3<sup>rd</sup> meeting. This could be an opportunity for us to get our foot in the door and maybe in the future we will be asked to participate in next year's Multi-Jurisdictional exercise. It's up to us – are we willing to give it a try? Budd would like to have a plan to present to the planners at the final planning conference on May 3<sup>rd</sup>, so please email him with any ideas ASAP. He can be reached at: [buddwb4j@gmail.com](mailto:buddwb4j@gmail.com) More on this further on.

All things considered, Jan (W5GNK) is doing ok. She has said she's not leaving CTARC, but still needs time to of course, heal. Please keep her and her family in your thoughts. To those who may be unaware, Ross W5ANW became a *Silent Key* on March 29th. Ross had been very active in several capacities in the amateur radio community and his passing will be sorely missed.

Our next club meeting is Tuesday, May 3<sup>rd</sup>, at 7:00 PM at the Bell County Communications Center and I hope you all get a chance to attend.

73, Terry - KF5OHR





*"It's time for another chapter in the life of Archie Andrews! We invite you now to join Archie and his pals Jughead, Veronica and Betty in another comic adventure from Riverdale."*



*The Adventures of Archie Andrews* first aired over the NBC Blue Network on May 31st, 1943, then switched to Mutual in 1944, and then continued on NBC radio from 1945 until September 5th, 1953.

The character of Archie Andrews first appeared in comic books just two weeks after the bombing of Pearl Harbor in 1941. From the beginning, Archie was the epitome of the American teenager of the 1940s and the show was aimed straight at a pre-teen audience. The programs were designed to be nothing more than loud, goofy, and fun - and, from the reactions of the studio audience that attended each live broadcast, the show was clearly adored by its listeners.

There is still quite a bit of interest in Archie today, as there are numerous Archie fan clubs, hobbyist sites, discussion boards, etc. It just shows that good comedy is timeless.

You can tune-in again to 51 episodes with Archie, Betty, Veronica, Jughead and the rest of the gang at Riverdale High School, by visiting:

<https://archive.org/details/ArchieAndrewsOTR>



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!

### May NCS & Back-Up NCS Schedule

May 5th: Net Control: AD5SK Back-Up: KE5ISN	May 12th: KE5ISN KD5FJF
May 19th: Net Control: KD5FJF Back-Up: KG6FUJ	May 26th: KG6FUJ N5JLL



### U.S. Islands Event

This event will be on Saturday, May 14, from 0000 UTC through 2359 UTC (Friday evening to Saturday evening in the continental US). This event is to promote portable ham radio operation from islands in all bodies of water — lakes, rivers, streams, ponds, and coastal islands in US territorial waters.

For more information on the U.S. Islands Program, please visit:  
[www.usislands.org](http://www.usislands.org)



### Military Cross-Band Test

The annual military to amateur cross-band communications test will be held on Saturday, May 14th.

Participating military stations transmit on selected military MARS frequencies and listen for amateur radio stations in the amateur bands. The military station operator will announce the specific amateur-band frequency being monitored.

More information can be found at:  
<http://www.usarmymars.org/home/announcements>



## WX4NHC Annual Station Test

*Julio Ripoll, WD4R*

WX4NHC the amateur radio station at the National Hurricane Center, will conduct its annual station test on May 28th, from 8:00 AM to 3:00 PM CDT, to test its' station equipment, antennas, and computers in advance of the 2016 hurricane season, which starts June 1st and runs through November 30th.

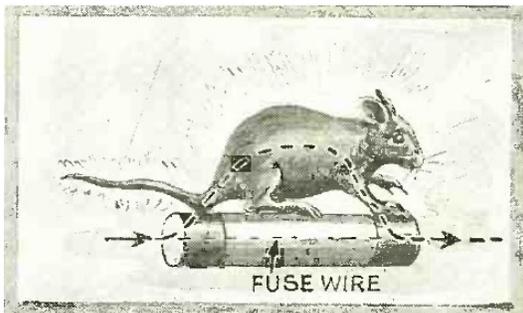
Primary operations will be on the Hurricane Watch Net frequency of 14.325 MHz and they will announce when they are to QSY. Other suggested SSB frequencies are 3.950, 7.268, 21.325 and 28.425 MHz, +/-QRM. They will also will be on the IRLP Hurricane Net on node 9219 and EchoLink WX-TALK Conference node 7203.

QSL cards are available via WD4R with an SASE.

## QRT'd by a Mouse

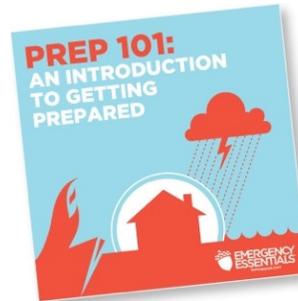
*Radio News - May, 1926*

Station CKAC in Montreal, suddenly went off the air one night. Engineers found that a mouse had walked across a main fuse terminal and was burnt to a crisp.



## An Introduction to Getting Prepared for Storm Season and other Bad Stuff

Contributed by *Leon Cheney, K5ZZM*

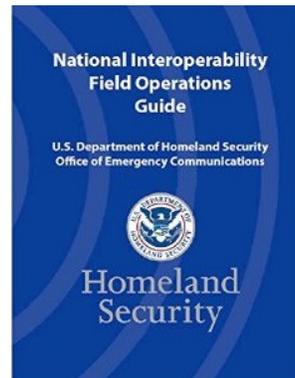


This free simple guide is a concise overview of the 12 areas of preparedness, giving you tips on how you can be ready for any emergency.

This 11-page guide can be downloaded at: <http://beprepared.com/prep-101-download>

## National Interoperability Field Operations Guide

Contributed by *Budd Johnson, WB4J*



This reference is for emergency communications planning and disaster response. The NIFOG includes rules and regulations for use of nationwide interoperability channels, tables of frequencies, standard channel names, and other reference material.

This manual can be down-loaded at: <https://casmnextgen.com/pslib/index.php/webview?docid=1>



## Listening in Japan

*Radio News - May, 1926*

There is required in Japan the payment of an annual license fee of about \$9.50 for listening-in. When the license is granted to a listener his set is tuned to the wave-length of the Tokyo Municipal Broadcast station and then sealed, so that no other station may be tuned in. It is reported that this is done in order that no radical ideas can be picked up if put on the air by secret broadcast stations.



## A Statement Regarding "Singing Commercials"

*WQXR Program Guide - May, 1944*

For some months the management of WQXR has been studying the problem of "singing commercials" and advertising "jingles." Starting with a prohibition of this form of advertising on our evening broadcasts, we have found the audience response to the policy so favorable that we have extended the ban to the daytime hours as well.

Because WQXR specializes in the presentation of good music, the station has found that "singing commercials" are too much of a transition from good music and that they are apt to create ill will among WQXR listeners for the advertiser as well as the station.



## Ham Expo Amateur Radio Test Session

Contributed by *Kenneth Watkins, KE5ISN*

The VE's at HamExpo on April 16th, were kept busy administering a total of 25 license exams which resulted in 5 new Technicians, 9 new Generals and 5 new Extras.

Included in that number is one of CTARC's newest members Patricia Bahr KG5KZW, who passed her General exam. Gail Chandler, the XYL of Emery Chandler-KG5HFI, passed her Technician exam. Her new callsign has yet to be posted at this writing.

What might be considered the "star of the show" was 8 year old Mary Steelman-KG5EXJ who passed her General Class exam - missing only one question.



*Mary Steelman - KG5EXJ / AG*

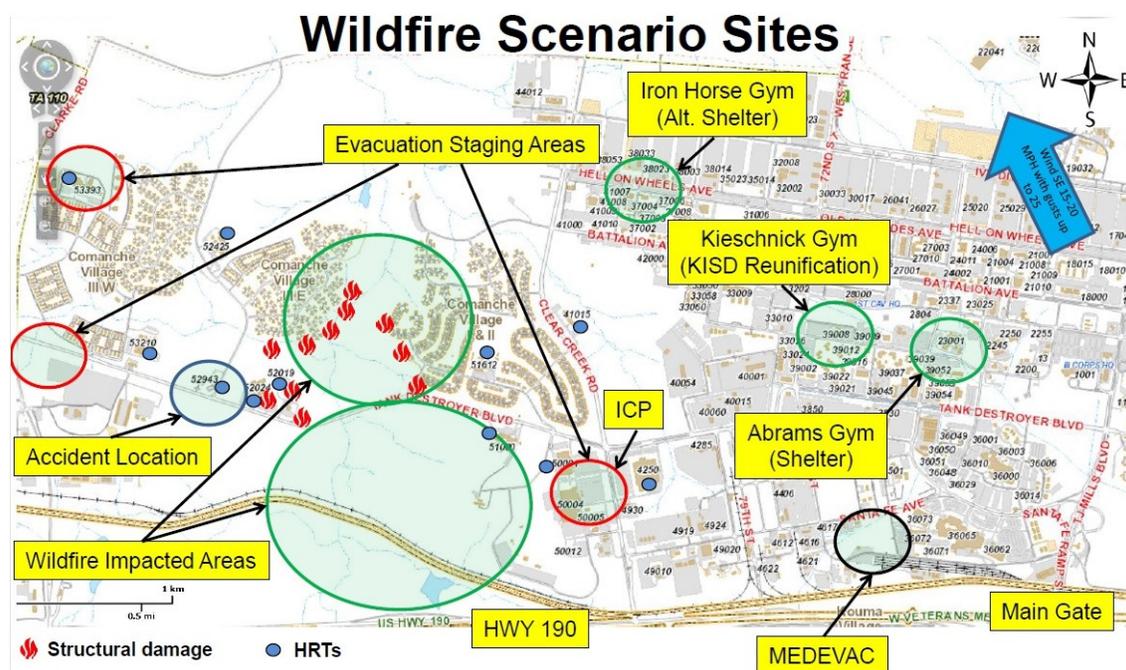
Mary, who has been licensed since November 2014, pulls no punches and says she will soon go for her Extra Class so she can raise her hand and say, "I got mine!"

Her proud parents are Mary-KF5ZXI and Scott-KF5ZRZ, both Extra Class license holders.

A huge thanks to all the VE's who participated in the exam sessions!

## **"Phantom Wildfire"** **Fort Hood Full-Scale Exercise**

May 11th and 12th, Fort Hood will be conducting a massive full-scale exercise, entitled *"Phantom Wildfire."* This exercise is suppose to involve up to 8,000 personnel including participants and role players, with the scenario being a wildfire erupts on post somewhere north-west of Highway 190 and Clear Creek Road, resulting in a mass evacuation and emergency sheltering operations of 425 role players. Also to be included, will be 40 – 50 "casualties" which will involve Darnell, Metroplex, Coryell Memorial and possibly Seton hospitals receiving the "casualties" and a "burn victim" who will be air-evac'd from Fort Hood to Fort Sam Houston, via helicopter. The exercise will kick-off at 9:00 AM, on Wednesday, May 11th, following an announcement over Fort Hood's "Big Voice" public address system.



Numerous agencies from Bell and Coryell County, along with state and federal emergency service agencies are also expected to be included in the exercise. The Fort Hood EOC will be activated in the HQs III Corps building, along with an Incident Command Post in the old PX parking lot just off of Clear Creek Road, plus evacuation, care & sheltering facilities spread-out across post.

Amateur radio operators have been invited to both observe and exercise their skills and train for a future possibility of assisting Fort Hood and local governments in emergency or backup communications. At present, the thoughts are to have an amateur radio operator at the HQs III Corps Emergency Operations Center, Building 1001, second floor, west atrium, Room W217, with the tactical callsign *"EOC"*. Another at the Incident Command located in the parking lot of the old PX on Clear Creek Road, with the tactical callsign *"Command Post"*. One operator at the Copperas Cove EOC, with the tactical callsign *"Cove PD"*. Operators working here should have knowledge and experience with the radio equipment located there.

Other individuals could be assigned here to receive training on the radios and the EOC operations within the Copperas Cove Police Department.

Another operator could be used at the Metroplex Hospital Operations Center or ER, with the tactical callsign "*Metroplex*". The individual assigned here should have knowledge of the hospital operations and radio at the hospital. A handheld radio or mobile unit could also be used. Another consideration is to have an operator at the Coryell Memorial Hospital in Gatesville, using the tactical callsign "*Coryell Memorial*".

Finally, one operator will be located at his home, who will need to have VHF and HF capabilities to monitor the traffic on both repeaters and act as a relay station if required, with the tactical callsign "*Relay*".

Individuals deployed to any on-post position should have a military ID to facilitate access to the Post. Primary communications will be through the K5CRA Repeater on 147.260(+) PL 88.5 and the W5AMK Gatesville Repeater on 146.960(-) PL 123.0, to be used as the backup.

One of the taskings in this exercise, is for Fort Hood's Directorate of Emergency Services, to exercise their Mutual Aid communications system. The state of Texas has several radio frequencies set aside for mutual aid / interoperability communications. None of the frequencies listed below are guaranteed or forecast to be in use, but with several participating outside agencies, they may become active during the exercise.

Channel Name	Frequency	Usage / Remarks
VCALL10	155.7525	Calling Channel
VTAC11	151.1375	Tactical Channel
VTAC12	154.4525	Tactical Channel
VTAC13	158.7375	Tactical Channel
VTAC14	159.4725	Tactical Channel
VTAC17	161.8500	Output Frequency Itinerant Repeater
VTAC17D	161.850	Tactical Channel
VFIRE21	154.2800	Tactical Channel
VFIRE22	154.2650	Tactical Channel
VFIRE23	154.2950	Tactical Channel
VFIRE24	154.2725	Tactical Channel
VFIRE25	154.2875	Tactical Channel
VFIRE26	154.3025	Tactical Channel and Air-to-Ground
VMED28	155.3400	Tactical Channel and Air-to-Ground
VMED29	155.3475	Tactical Channel
VLAW31	155.4750	Tactical Channel
VLAW32	155.4825	Tactical Channel
VTAC33	159.4725	Output Frequency Itinerant Repeater
VTAC34	158.7375	Output Frequency Itinerant Repeater
VTAC35	159.4725	Output Frequency Itinerant Repeater
VTAC36	151.1375	Output Frequency Itinerant Repeater ( <b>Primary</b> )
VTAC37	154.4525	Output Frequency Itinerant Repeater ( <b>Secondary</b> )
VTAC38	158.7375	Output Frequency Itinerant Repeater
TXCALL1D	154.9500	Car-to-Car
TXCALL2D	155.3700	Air-to-Ground

*Unless otherwise noted, these are all simplex frequencies using a PL Tone of 156.7. The repeaters listed use a PL Tone of 136.5.*

One agency that is fully expected to participate in the exercise, is the Texas Forest Service. While they have several frequencies at their disposal for use, it would seem reasonable to expect to hear their radio traffic on some of the following frequencies:

159.285	State-Wide Travel
159.435	Tac-7
151.475	Tac-8
159.315	Tac-9
159.435	Tac-10
151.475	Tac-11
159.315	Tac-12
159.225	Waco Repeater
159.300	Air to Ground

*The simplex frequencies of Tac-7, 8 and 9 along with their Air to Ground frequency use a PL Tone of 114.8. Tac-10 thru Tac-12 use a PL tone of 127.3. The Waco repeater has an input tone of 210.7 and an output tone of 225.7.*

This multi-event exercise involving the maximum community support possible, is based on a realistic scenario, with the objective of assessing the current capabilities so that training gaps, deficiencies, and vulnerabilities are identified and remedied prior to a real incident.

The combined effort of local and military first responders is important because this way if Fort Hood first responders have to go into the civilian community or outside agencies have to come into Fort Hood, each will know the equipment that is available to provide certain rescues or incident responses.

The proposed time table of the exercise is as follows:

**Wednesday, May 11th, 9:00 AM** - the exercise will commence with the response of various on and off post agencies.

**Wednesday, May 11th, 4:30 PM** - the exercise will be paused.

**Thursday, May 12th, 8:00 AM** - the exercise will resume in a "recovery" and consequence management mode.

**Thursday, May 12th, 12:00 PM (Noon)** - End of exercise, followed by a "Hot Wash" of personnel involved and role players at 1:00 PM.

*Administrative notes...*

During the exercise, traffic control measures in the "affected areas" may result in short delays. Smoke, along with other visual effects and / or sound effects may be used in relation to the exercise.

Weather concerns: at the initial planning meeting, the matter was brought up concerning severe weather, as we are entering that time of year. The response from the planners was that it would take some pretty severe weather to result in a cancellation of the exercise.

We could always use a few more interested parties along with alternate Home Relay Stations. If you, or anyone you know, that wants to participate in this exercise please contact Budd Johnson-WB4J, at: [buddwb4j@gmail.com](mailto:buddwb4j@gmail.com)



## Help Needed Toward New 6 Meter Repeater

Plans are brewing to put a new 6 Meter repeater on the air in the Moffat area thanks to Emery Chandler-KG5HFI and Toby Driscoll-N5SIM. Don't have 6 Meter capability? No problem, the repeater is being set up so that not only will it be directly accessible via a 6 meter frequency, but also through both 2 meters and 70 cm linked through remote base radios.

Huge strides have already been taken toward this project, but as with any large endeavor, further assistance is needed - especially monetary assistance. This is something the entire regional amateur radio community could get involved with. Both Emery and Toby have been asked to attend our next meeting and give as larger over-view on this project. More information on this can be found at:

[http://www.troyradio.net/pb/wp\\_3b76706d/wp\\_3b76706d.html](http://www.troyradio.net/pb/wp_3b76706d/wp_3b76706d.html)

## Coryell County Joint Communications Group

### Meeting Notes of April 13, 2016

Bob reports that he got the room which is to be the County's EOC cleaned out. Next he's having some conduit made to install wiring and outlets in the room, then paint.

A base station with county & police radios and presumably amateur radio as he described it would be in the corner, but didn't say where the radio was coming from. He's also having 4 sections of a used tower being painted.

He said he's also trying to get a diesel 15kw generator. Completion maybe in a couple of months.



## Complete, Like New, 220 Station

For Sale is a like-new TYT Model TH9000D 55 watt, 222 MHz transceiver with the programming software and cable, along with a Cushcraft ARX-220B 5/8th Wave vertical antenna.

These items are basically brand new, might add that I personally know that they were purchased not that long ago. Asking price for everything together is \$250.00. If interested, please contact Rob Gregg - KD5FJF, at: [kd5fjf@yahoo.com](mailto:kd5fjf@yahoo.com)

More information on the radio can be found at: <https://www.youtube.com/watch?v=VBMU510Cqx0> and more info on the antenna is at: <http://www.cushcraftamateur.com/Product.php?productid=ARX-220B>



A group of German operators will be active from Palestine 8 - 15 May as **E44QX**. QSL via DF8DX.

Special Event Station **ZV451RIO** will be active until June 3rd in observance of 451 years since Rio de Janeiro was founded. QSL via PY1AA.

**7Y9LI** will be active from the Cap Ivi Lighthouse, through the 5th of May. QSL via SM4VPZ.

**7Y9GH** will be active from the Cap Tenes Lighthouse, 19 - 23 May. QSL via SM4VPZ.

**HB9LCA** will be active from Vanuatu 1 - 27 May as **YJØCS**. QSL via his home call.

**J11LET** is active from Chichijima Island in the Ogasawara Islands until the 6th of May as **JD1BOI**. QSL via his home call.

**JJ1DQR** will be active from Koror Island, Palau 13 - 15 May as **T88QR**. QSL via his home call.

**W6HB** will be active from Rarotonga Island through the 10th of May as **E51DLD**. QSL via his home call.

**VO1OK** will be active from Ambergris Caye Island through the 3rd of May as **V31OK**. QSL via his home call.

**PBØAEX** will be active from Curacao Island 16 May - 6 June signing **stroke PJ2**. QSL via LOTW, eQSL.

**GØVDE** will be active from Saint Helena Island 22 May - 6 June as **ZD7VDE**. QSL via MØURX.

**IV3FSG** will be active from the Democratic Republic of the Congo 1 May - 30 May as **9QØHQ**. QSL via IK3GES.

Listen for the Belize Amateur Radio Club - **V3V**, which will be active from Belize through the 20th of May. QSL via V31BZ.

Three German operators - DL1AS, DM4IM, and DK4BX will be active from Belize through the 20th of May as **V31DL**, **V31IM** and **V31BX**. QSL each via their respective home call.

**JA3IVU** and **JH3AEF** will be active from Burkina Faso through the 4th of May as **XV2IVU** and **XT2AEF**. QSL each via their respective home calls.

**ON6EF** will activate 4 Dutch islands - Texel, Vlieland, Ameland and Schiermonnikoog during the period 5 to 8 May, signing **stroke PA**. QSL via his home call.

**CS2ND** will be active May 26 -28 from Noudar Castel in Portugal. QSL direct.

**LU9EFO** will be active from Easter Island 6-13 May signing **stroke CEØY**. QSL via F4BHW.

**DF2WO** will be active from Burkina Faso through May 15th as **XT2AW**. QSL via MØOXO.

Special event station **8J1ITU** will be on the air from Japan through May 31st. QSL via Bureau (JARL) or eQSL.

## Amateurs Asked to Keep 7.060 MHz Clear for Emergency Traffic

In the wake of the 7.8 magnitude April 16th earthquake in Ecuador, the Amateur Radio community is being asked to keep 7.060 MHz clear for emergency traffic.

The earthquake has resulted in hundreds of deaths and many more injuries as well. Electrical power and commercial telecommunication systems have been either destroyed or knocked out in the affected area. Many roads have been rendered impassable because of earthquake rubble.

Hams in Ecuador have been reported very busy in coordinating search and rescue activities.



## *The First Lady of Radio* **Eunice Randall**

Maybe some other lady came before her, but in spite of that, it can be said to call Eunice Randall the first lady of radio. If you had been around greater Boston during the 19-teens and early 20s, you might have heard Eunice Randall referred to as "ER" since radio announcers were not usually allowed to use their names on the air. To her ham radio friends, she was "the OW of 1XE," (later to become WGI) or "1CDP" to some of her youngest fans, she was "The Story Lady." Eunice Randall was all of this and more - although she was born in an era when women's options were still extremely limited, she grew up to achieve a number of 'firsts' in the exciting new industry called radio broadcasting.

The only "radio bug" in her family, she taught herself Morse Code and learned all about ham radio. Her first station which she built herself, was known by her initials "ER". It was a time when you made your own call sign since radio was not regulated.

A chance encounter with another radio pioneer, Irving Vermilya, led to a mentorship that helped her pick up the skills to be hired as the first female radio engineer for the American Radio and Research Company (AMRAD).



*Eunice Randall at station 1XE*

In 1918 AMRAD opened a broadcast station - 1XE - on Medford Hillside and in 1919 Eunice became an announcer for the station. Despite the fact that 1XE transmitted with only 100 watts, it was received as far away as Chicago and St. Louis on a fairly regular basis, and several times it was heard in London, England. In February 1922, 1XE was assigned the call letters WGI. Unfortunately, Eunice Randall's radio career was cut short by the fact that WGI and its parent company AMRAD ultimately went bankrupt. The station left the air in the spring of 1925, never to return.



Eunice continued to work as one of the few women radio engineers, and she also continued her involvement with ham radio - eventually becoming W1MPP, and had a successful career as a radio expert consultant who was active in the Eastern Massachusetts Amateur Radio Association and the South Shore Amateur Radio club.

Eunice became a *Silent Key* in March 1982, at the age of 84. In 2011, she was inducted into the Massachusetts Broadcasters Hall of Fame. ER made a dent in this old world and she enjoyed her firsts in the trade.



## Does War Affect the Weather?

As early as 1916 in the middle of World War I, meteorologists considered whether explosions at the front lines were causing extra precipitation, and was it possible that the tremendous expenditure of ammunition had facilitated changes in the weather? What would become known as "The War to End All Wars" came and went without an answer to the question.

Years pass... it is now Thursday morning, May 11th, 1944, along what would normally be in other times, a quiet farming field in south east England. A distant buzz builds into a sudden roar as 1,444 gigantic B-17 *Flying Fortress* bombers from the United States 8th Army Air Force took to the air on a bombing raid to Germany. Take-off conditions were ideal for "The Mighty 8th" as bomber after bomber rose into the clear blue sky.

Witnesses to the huge Mighty 8th bomb group lift off, reported that the sky was turned white by aircraft contrails, as the aircraft circled and assembled into formation. It was also observed that it was significantly cloudier and cooler than the surrounding areas from about 7 a.m. to 1 p.m. upwind of the bases.

The morning ended up to be chillier than expected.



Allied bombing raids leaving from Britain seem to have affected the local climatic conditions. Rob MacKenzie, now at the University of Birmingham, and Roger Timmis of the British Environment Agency looked at weather records from 1943 to 1945 and found that after massive air raids the areas the planes flew over were cooler than similar areas nearby.

The white vapor trail left by an airplane, called a contrail, can cause weather changes. The contrails form when hot, particulate-filled airplane exhaust blasts into the cold air of the upper atmosphere, in a layer called the troposphere. Sometimes the contrails simply fade away, but they can also become seeds for larger cirrus clouds. The thin, wispy cirrus clouds block some of the sun's rays, causing the shaded area underneath to become cooler.



Contrails are known to have several effects on climate. On the one hand, they act as a blanket, trapping heat that would otherwise escape into space. On the other, during the day they reflect incoming sunlight, cooling the Earth below more than it is warmed by the other effect. But overall, the consensus among climatologists is that they warm the planet.

The Allied bombing raids during WWII had inadvertently experimented on the weather by producing these huge contrails over England.

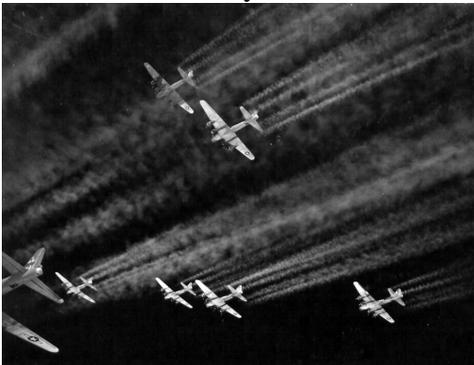
By looking at World War Two records, the researchers were able to look at a time when commercial and civilian air traffic was rare – unlike today – in the 1940s, there was hardly any civilian air traffic. In East Anglia, the Midlands and the West Country, where many of the bombing raids were launched, there were almost no other airplanes. By 1943, the United States began basing bombing raids out of England, and there was a tremendous increase in the amount of air traffic in specific and well recorded areas. That made distinguishing airplane-influenced climate data more clearly discernible from unaffected nearby climatic conditions.

This is tantalizing evidence that Second World War bombing raids can be used to help us understand processes affecting contemporary climate, by looking back at a time when aviation took place almost entirely in concentrated batches for military purposes, it is easier to separate the aircraft-induced factors from all the other things that affect climate.

Using operational records from the US Army Air Force and the British Royal Air Force, and



archived weather data, Timmis and MacKenzie realized they could compare temperatures immediately beneath a bombing raid's flight path, to those several kilometers upwind, where there would have been no contrails. The historical records offer an innovative use to document the daytime cooling affects due to these contrails, and they are consistent with what is already known.



When all commercial air traffic in the United States was grounded after the terrorist attacks of September 11th, 2001, scientists again got an unexpected opportunity to test ideas about the climate effects of the condensation trails left behind by aircraft. The study noted that when planes stopped flying on 11–14 September 2001, the average daily temperature range in the United States rose markedly, exceeding the three-day periods before and after by an average of 1.8 °C.

The study concluded by suggesting that these contrails could have a significant effect on daily temperature patterns. But a new analysis now claims that altered US temperature patterns during the three flight-free days can be explained by natural variations in cloud cover, rather than the absence of planes.

The study doesn't prove that the contrails have no effect on temperature, just that they are unlikely to have a major role. Others caution that the contrail effect has been exaggerated in public discussions because the events of 2001 were so shocking.

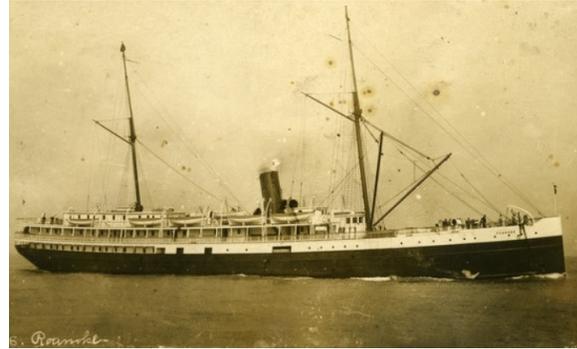
With air traffic projected to grow by 2–5% per year in the near future — amounting to at least a tripling in traffic by 2050 — the effects of contrails are expected to become an increasingly important factor in climate change. But atmospheric scientists are still unsure about the scale of the contrails' impact.

What is known however, is World War II changed everything about life in Britain, even the weather.

## In Memoriam: George E. Chamberlain and the Silent Loss of the *S.S. Roanoke*

By the early 20th century, Marconi's wireless had proven itself. Warren Tute, in his *Atlantic Conquest*, noted that "Wireless telegraphy was to deprive the sea of its ancient terror of silence." Yet by a strange irony it only gave it a new mystery—the mystery of missing Maydays and SOS signals.

The *S.S. Roanoke* was built in Chester, PA., in 1882 and was of 2,354 tons, 207 feet long with a beam width of 40.5 feet, and was one of the best known steamers along the California coast. At around midnight, May 8th, 1916, the *Roanoke* departed San Francisco bound for Valparaiso, Chile with a cargo made up of 600 tons of dynamite, 1,300 tons of wheat and several hundred drums of gasoline and oil, as well as 50 passengers and crew.



Amongst the crew members was George E. Chamberlain, the ship's wireless operator. Several messages were received from the *Roanoke* after she left San Francisco; the last message sent by Chamberlain was at 8:00 in the morning, May 9th, giving the ship's position as 90 miles south of San Francisco.



Chamberlain had been assigned to the *Roanoke* on April 23rd, and it was his first permanent assignment after having proved his mettle serving in other temporary assignments. In a letter written to his friend, a short time before his death, he expressed the fear that he would lose his life on the *Roanoke*. "I don't know whether I'll ever come back" he wrote, "Don't tell... not that I am afraid, but it would worry my mother."

The first indication that a tragedy had been enacted on the bosom of the ocean came at 6:00 pm on the 10th of May, when the Lighthouse Keeper at Port San Luis, saw through his glasses, a boat bobbing up and down on the waves at the end of the breakwater, about a mile from shore. There was no sign of life in the little craft. No movement could be seen, although in the bottom of the boat were the forms of several men.

A relief party was dispatched which found the life boat with the name *Roanoke* painted across its bow. Aboard the small boat were eight men - but only three survivors. The other five having perished from exposure. The survivors included the ship's Quarter Master Joseph Erbe, along with Manuel Lopez and John Roach.

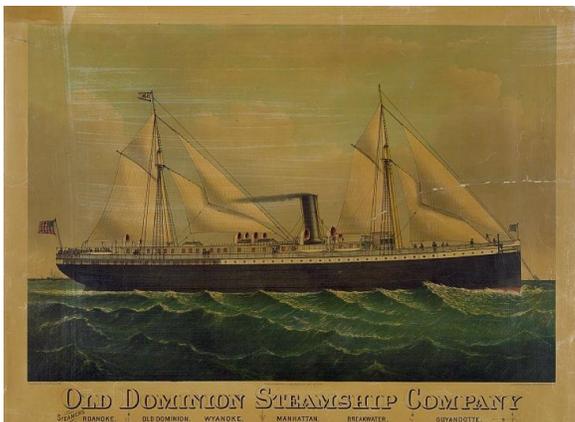
Statements made by the three survivors, all tally that there was no explosion and that the shifting of the cargo under the impact of heavy seas caused the ship to begin listing at 2:30 o'clock in the afternoon, and that it did not sink until about an hour later.

One of the survivors claimed that the chief engineer of the *Roanoke* had taken the dynamo of the wireless apart to repair it just before the vessel began to list. Had the radio been working all on board the vessel would have been saved as the survivors claim three vessels passed within sight of the *Roanoke* after she began to list, but it was impossible for them to see the trouble and they failed to observe distress signals which were flying.

Regarding the wireless apparatus on the *Roanoke*, Ellery V. Stone, assistant United States radio inspector, says that he inspected the steamer's radio apparatus before she left port and that it was in good working condition.

The steamer *Qulnalt* was within five miles of the *Roanoke* when she went down, but had no knowledge that the ship was in distress. Captain A. T. Stream of the *Qulnalt*, said that from the bridge of his ship he noticed the *Roanoke* about five miles astern between 2 and 3 o'clock in the afternoon. He looked away and when he looked again the *Roanoke* had disappeared. He believed that the *Roanoke* had been shut off by haze.

Answering statements that the *Roanoke* left San Francisco very heavily laden, the auditor of the California South Seas Company, which chartered the vessel, said that the stowing of the vessel was superintended by C. P. Doe, a competent steamship man, used his best judgment as to the amount of cargo his vessel could carry. Furthermore, the port surveyors are exceedingly alert to prevent overloading. The fact that the captain took the ship out and kept her on her course for sixteen hours goes to show that he was satisfied that the *Roanoke* was properly loaded.



Chamberlain met his death as his Captain did, at his post with his final resting place in the vessel's watery grave. His body was never recovered. He was twenty years old.

May his spirit find fair winds and following seas.

### "SPARKS"

*Poem written by George Chamberlain shortly before his death.*

We list through the night  
To our comrades afar,  
On the Tropical Seas  
Or beneath the North

Star,

We flash out glad tidings-  
Some of sorrow and hate,

Of a tempest arising  
Or a ship warned too late.  
Now we're hearing a ship  
And her cries of appeal  
Of a wave-wrecked reef,  
that is clutching her keel.

Ah! Her set is now still;  
Not a spark rends the air,  
And we dream of the  
story of death and  
despair.

We think of a face -  
He - my pal to his death;  
It is hard to believe  
He has breathed his last  
breath.

He's a man among men,  
E'en the Devil's defied;  
He has now met his God  
As the wireless men died.