

Greetings from L.A.R.A. President  
Ron Ford, KF5OMH

First off, this month, I want to give a big **THANKS** to Ron Bath, KG5VIS, for his past dedication as our Newsletter Editor and Webmaster. Ron took over the newsletter when I found myself with more things to do for the club than my plate would hold. He took on the task and really turned the publication into a first-class communique for our members. A few months after that he also volunteered to take on the task of redesigning our W5LVC.org web site. It too, was one of best sites in the NTX Section. As you probably read in last month's newsletter Ron has had to back away from some of his activities in order to focus his time with his lovely wife, Ellen and his own health issues. Hats off to you Ron and we look forward to the day you are able to be active again. THANKS AGAIN FOR A JOB WELL DONE.

If you missed the August membership meeting you missed a great presentation and demo on various digital modes by Tod, WE5TR. A copy of his presentation is on the W5LVC.org web site under the RESOURCES tab and select Presentations. By the way, there are a lot of other presentations from previous meetings on that page.

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**Web Site: W5LVC.org**

Check us out  
**facebook.com/w5lvc/**

*Lewisville Amateur Radio Association*

**2019-2020 Officers**

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**LARA Upcoming Events**

**Business Meeting**

**8:00 AM Saturday  
September 21, 2019  
Lewisville Central Fire Station  
188 North Valley Parkway  
Lewisville, TX**

**Weekly Nets**

**“Information and Help Net”  
Wednesday, 7:00 PM on 145.170  
PL 110.9, -.600 repeater**

**Saturday Breakfast  
(except 3rd Saturday)**

**Korner Cafe  
921 W. Main St.  
Lewisville, TX 75057**

**Association Contact Information**

**Email: W5LVC.Club@gmail.com**

**Mailing Address:**

**LARA, P.O. Box 292282  
Lewisville, TX 75029**

**Welcome New Members**

Quinn Hirniak, KI5FLF

Bob Waldick, KI5UB

Mike Asselta, KD0CDQ

Les Bannon, WF5E

Johnathon Allread, WG8E



**THE ARRAY**



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Association membership is open to all persons interested in amateur radio. Join at any meeting, by mail or on-line through our web site. Annual dues are \$25 individual, \$30 family.

**EVENTS**

**WESTERN DAYS**

**September 28, 2019**

Lewisville Western Days festival offers two days of great family fun, five stages of live music and western-themed activities for the whole family.

**On-air Special Event, Time: 10:00-15:00**

Operators will be on the air for 30 minutes to 1 hour blocks calling CQ for the W5LVC special event. Stations will be operating from each individual's QTH so there will be no need to set up equipment or to leave the comfort of your home. A special QSL card (pictured right) will be available for contacts who request them. If you would like to operate HF SSB, CW, FT8 or other digital modes or participate in any other manner contact Ron, KF5OMH at [w5lvc.club@gmail.com](mailto:w5lvc.club@gmail.com).



**Parade Float, Time 10:00-13:00 (approximate)**

LARA will have a float in the Western Days parade. We'll have a float in the parade with a simulated operating station. In addition there will be Cub Scouts, Girl Scouts and Boy Scouts throwing candy to the crowd.

**JOTA**

**62nd Annual Jamboree-On-The-Air**

**Date: Saturday, October 19, 2019**

**Location: Conner Pavilion at Lake Park on Lake Lewisville**

**Time: 10:00-17:00**

**We'll be operating as K2BSA/5 and will be hosting several active radio stations.**

All Cub Scouts, Boy Scouts, Girl Scouts and adult leaders are welcome to join us for our 4th annual JOTA event. This is your opportunity to explore the science of Amateur Radio. You'll be able to work with experienced radio operators and talk to other Scouts around the country and possibly the world. In addition, there will be Radio Merit Badge counselors on site to work with scouts who wish to obtain the Radio Merit Badge. (Please note that it is not possible to complete all requirements during this event.) Each participant will receive a certificate of participation suitable for framing.

Contact: Mike Reitz, 214-535-1368 or [w5lvc.club@gmail.com](mailto:w5lvc.club@gmail.com)

**CHRISTMAS PARTY**

**When: Saturday, December 14, 2019, 6:30 PM**

**Where: Korner Café, 921 W. Main St., Lewisville, TX**

**Details:** All members, non-members and their guests are invited to come join in this fun family event. We'll order dinner from the regular menu and everyone is responsible for their own check. There will be a gift exchange so bring a gift for each attendee valued at no more than \$20.00. When you arrive, you'll be given a drawing ticket in exchange for your gift which will be placed on the gift table. During the evening there will be drawings from the "hat." When your number is called, you choose a gift from those remaining on the table. Watch out now, because you may not get to keep that gift. Gifts can be stolen from the person holding it in lieu of picking a gift from the table. (Gifts can be stolen three times then they are frozen). If your gift is stolen, you get to choose another from the remaining gifts on the table. There will also be radio and non-radio related door prizes.



## **HAM RADIO TECHNICIAN** **CLASS**

**THE LEWISVILLE AMATEUR RADIO  
ASSOCIATION  
(LARA)**

**WILL BE HOSTING A HAM RADIO TECHNICIAN  
CLASS**

**November 2, 9 & 16, 2019 (2 – 6 hr. learning  
sessions and one 3 hr. review/test session)**

**Times: 8:00 AM – 3:00 PM (first 2 sessions),  
10:00 AM – 1:00 PM (3<sup>rd</sup> session)**

**AT THE LEWISVILLE CENTRAL FIRE STATION TRAINING  
ROOM**

**Get your first (Technician) ham radio license. All students who successfully complete the class and testing will receive their first ham radio compliments of LARA.**

Entrance to the training room is at the rear of the building adjacent to the fuel pumps. Test session will be conducted on Saturday November 16 following the review session. Fee for the test is \$14.00. The fee is payable in cash, check, or money order. Applicants must bring two forms of identification, one of which should be a picture ID.

There is no age limit for individuals to take this class and test for the Technician license.

The class will be taught using the Gordon West Technician Class Manual. Having the manual for the class is not mandatory but strongly suggested. It is also suggested that students review the manual prior to the class sessions. Manuals can be purchased at [www.w5yi.org](http://www.w5yi.org), Amazon.com, and some local book stores.

Complete the registration form at <https://forms.gle/Ji1cYZzmnRqfTPTa8> to register for the class.

**Questions? Contact Jim, 972-523-8467 or Ron, 972-742-7839 or email [w5lvc.club@gmail.com](mailto:w5lvc.club@gmail.com).**



President Ron Ford, KF5OMH  
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September 28 is the Western Days Parade and Special Event Station. This is going to be a bit different than most special event stations in that we will pass control to different operators each hour from 1000 to 1500. There are still plenty of opportunities to get in on the HF operation. If you would like to volunteer and work phone or a digital mode with the club call sign please contact me. Mike, W5EVT is coordinating the parade effort. If you would like to ride in the parade all you have to do is smile and wave at the crowd contact Mike.

Do you participate in our Wednesday evening Information and Help net? If not, why not? You have no idea what you're missing. Each week Jim, WB8YWA has a topic of interest to the ham radio community. If you don't want to participate in the on-air discussion just check in and say "NO TRAFFIC"; this will indicate to net control that you just want to listen. Yes, you can listen without checking in but, by checking in we have a better idea of the community we are serving. On the other hand, this is a great way to build up your on-air skills with fellow members and friends. Want to learn a new skill? Here's an opportunity to take on the net control or alternate (logger) net control function. It's really quite easy using the guides we have for each position. Come join us on the W5FKN repeater (145.170, -.600 offset, PL 110.9) at 7:00 PM every Wednesday.

Don't forget – Saturday, October 19 is our Scouting Jamboree-on-the-air event. Mark your calendar for the date. Before long Mike, W5EVT, our Operations Director will be looking for folks to staff the event. It takes more than a few people to help orchestrate this event so please raise your hand when Mike comes calling. We're trying to coordinate contacts with a Scouting Amateur Radio group in Brazil for this event. Hopefully, we'll be able to make this happen on one mode or another. If you've never worked with youngsters getting on the air, many for the first time, you're in for a big treat – it's a blast.

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### Support LARA with AmazonSmile

AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, at no cost to you. When you shop at [smile.amazon.com](https://smile.amazon.com), you'll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to LARA. To shop at AmazonSmile simply go to [smile.amazon.com](https://smile.amazon.com) from the web browser on your computer or mobile device. You may also want to add a bookmark to [smile.amazon.com](https://smile.amazon.com) to make it even easier to return and start your shopping at AmazonSmile. The AmazonSmile Foundation will donate 0.5% of the purchase price from your eligible AmazonSmile purchases. On your first visit to AmazonSmile ([smile.amazon.com](https://smile.amazon.com)), you need to select Lewisville Amateur Radio Association as the charitable organization to receive donations from eligible purchases before you begin shopping. AmazonSmile will remember your selection, and then every eligible purchase you make at [smile.amazon.com](https://smile.amazon.com) will result in a donation to LARA.

### Kroger Rewards

If you shop at Kroger and are a member of their Rewards Program you can also support LARA by selecting Lewisville Amateur Radio Association as your charitable organization of choice. Simply sign in to your account and select us and Kroger will donate 0.5% of your eligible purchases to LARA.

### Matching Funds

Many employers will match hours that employees spend supporting a non-profit with donations to that non-profit. If your employer has such a program LARA may qualify to receive these types of funds as we are an approved 501 (C) (3) organization. So, you're retired? Some companies even support a program of this nature for their retirees. Check with your current, or former, employer to see if they have a program of this nature. If 501 (C)(3) details are needed

President Ron Ford, KF5OMH  
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Are you a member of the ARRL? If so, is your profile on the ARRL web site current? It's easy to do that by signing in to the site and updating your information in the member portal. In addition to the monthly QST magazine that is part of your membership benefit there are several on-line news letters that you can receive. Again, in the member portal you can select the communications you wish to receive. One of the ones I like is the ARRL Letter that comes via email on a periodic basis. See separate article elsewhere in this newsletter.

For the past few months there has been a move afoot by the French Amateur Radio Union to reallocate the 144-146 MHz band portion to the aeronautical community. As this article was being written the following was received from our West Gulf Division Director --

“The CEPT Conference Preparatory Group met in Ankara, Turkey this week. The French proposal for a study of the allocation of 144-146 MHz for aeronautical mobile service purposes was removed. This bodes well for the issue not being considered at WRC-19 or WRC-23.

See: <https://tinyurl.com/y579nxh8>

See: <https://tinyurl.com/yvf8q8bw>

See: <https://tinyurl.com/y5dlu45n>

John Robert Stratton  
 N5AUS  
 West Gulf Division Director”

The September meeting is Saturday, September 21 and we'll have a very special guest speaker. Steve Lott, KG5VK, the ARRL NTX Section Manager will be joining us to talk about what is going on with the ARRL and particularly within the NTX Section. Don't miss out on this informative presentation. Come on out and bring a guest.

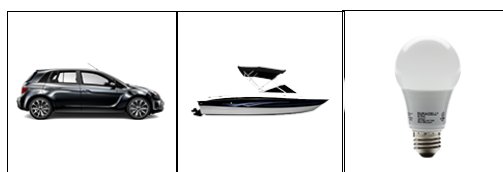
**BATTERIES PLUS BULBS**

1093 W. MAIN ST., SUITE #222  
 LEWISVILLE, TX 75067

**Your Destination for Batteries, Light Bulbs, Lighting Fixtures & Repairs.**

Here is a Club benefit that very few of us take advantage. We get 10% discount on all purchases at the **Batteries Plus Bulbs** location in Lewisville, right across the street from the fire station.

They have batteries for cars & trucks, cell phones, SLA, motorcycles, boat/marine, and golf carts. They also have Alkaline batteries and do cell phone repair. As well as key fob replacements, lighting & fixtures and chargers.





**TREASURER'S REPORT**  
Clark Highsmith, K5LGX



*Greetings members and friends of LARA,*

The Fall season is upon us. Within weeks, retailers will begin issuing calls to action for the Christmas season. Before then, we have two major events: the Western Days SES and JOTA. I hope that all members will make the effort to participate in both of these events.

Our big expense for the month was to update our web page domain registrations. By doing so at this time we were able to save money and make adjustments that should save us money going forward.

We received income from dues paid by new members and received an Amazon Smiles donation. If you remember seeing the city refund last month, you have a good memory. There was a technical issue with the check and it did not make it into the account until this month.

LARA Treasurer

**LARA Treasurer's Report--August 31, 2019**

Checking Account

Beginning Balance		\$2,743.56
Income		
Dues	\$25.00	
Donations	\$21.59 Amazon Smiles	
Events	\$150.00 City Refund	
Total Income	\$196.59	
Expenses		
Website	\$167.13	
Miscellaneous	\$42.44	
Total Expenses	\$209.57	
Ending Balance		\$2,730.58
Petty Cash (Included in balance)		\$0.00
Club Assets		
For Sale	\$0.00	
Stock (Not for Sale)	\$2,519.28	
Loaner Equipment	\$375.00	
	\$2,894.28	
<b>NET VALUE</b>		<b>\$5,624.86</b>

**TECHNICAL DIRECTOR**  
*Jim Horton, WB8YWA*

**Information and Tips on coax connectors.**

Here are some of the types and frequency for the different types.



In our world of ham radio we have five types that are used mostly.

**SMA**

Good to use in frequency to over 12 GHz

Used on RG-174 type coax. (Very small coax)

Hand held radios use them for the rubber duck antenna and for external connection.

Inside UHF equipment for connection from different circuit boards.UG-175

**RCA phone jacks.**

Used on smaller coax RG-58 and could be used on RG-8X



This connector was widely used in the early days before solid state for 100 watts or less.  
Heathkit and Collins use them on the output of their rigs and as inputs on their  
amps.

We think of them as stereo connectors.

Not used much today.

#### BNC

Good to use in frequency to over 2 GHz

Used on smaller coax also.

Used mostly in test equipment connections.

Patch panel

Low Loss

#### PL-259

Good to use in frequency to over 300 MHz

Used on small and large coax.

In the part number of this connector it states it is a UHF connector. While it can be used  
at these higher frequency it has a lot of loss compared to the N-Type below.

When using small coax a insert reducer is needed.

UG-175 is type number for RG-59

UG-176 is type number for RG-8X

#### N-Connector

Good to use in frequency to over 8 GHz

Used on large coax

Has less loss of any of the above connectors.

Used on the higher frequency of 144 MHz & higher,

Can be used on any frequency.

**Coax Connector Adapters**



All of the above connectors have adapters where you can go from one type to another or even the same type. Here are a few of them;

Barrel connector for attaching two coax together.

RCA to PL-259

BNC to SO-239 (Female to the PL-259)

N to SMA

There is an adapter for every type of connector.

Different type of connector connection.

There are solderless type that have special crimp pliers to connect the coax to the connector. Not my favorite but a lot of hams use these only.



There are solder type, where you must solder the center and shield to the connector. My favorite if I am using PL-259.



There is coax seal that is very important to use when connector will be outside in the weather to make it  
Be warned that there are cheap (China) coax connectors that work but you get what you pay for it. It does make a big difference and is worth the added cost.

- Couple of the best brand names are;
- Amphenol
  - Times Microwave (LMR Folks)
  - There are many more.

There is a lot more information on this subject and I encourage you to search the internet to learn more.



# There is a need for CW and here is my case for it.

By Jim Horton WB8YWA



In 2001 the FCC dropped the 13 and 20 WPM requirements to obtain your General and Extra class licence, they standardized to the 5 WPM for all test. Then again on February 23, 2007 the FCC dropped the requirement to send and receive the 5 WPM. Morse Code (CW) was dropped from the ham radio licensing. If you ask a ham radio operator what he or she feels about these CW requirement you will get a mix bag of “We should not have ever removed it”, to “I wouldn’t be a ham if it was still required”. The ham who had to take the CW test to obtain his license pretty much states it still should be and for good reason, he or she worked hard spending time to obtain this skill. I am one who had to pass the 5 WPM and then the 13 WPM back in the 70’s. I am glad I learned code, even though I do not use it as much as I should, but still can copy about 8 to 10 WPM (slow to many CW operators) but enough to grab that Special Event Station or DX contact.

Now within our club membership we only have a few that know any code at all or use it. We are blessed to have one that I call a real CW operator who demonstrates it during our Field Day outings. So with so little of us into CW why am I spending time on this subject? Well here it is, why I feel we all should know some Morse code; remember the main reason for Ham Radio to exist is to be prepared in case of emergency. This is why there is ham radio at all. We are to be the communications that is needed in these times. Below are a few points that states why I feel you should know some CW to support this need.

It is very easy to construct a CW Transmitter under emergency conditions or any time.  
AM/FM or SSB are harder to copy during weak signals. CW is much easier.

Now let us look at everyday life and your family during an emergency. If you know simple CW skills you can flash a light and send CW, you can turn on and off your transmitter by shorting two mic wires and send CW. It has been used by prisoners of war to blink their eyes to send out CW. Even if you are not having an emergency but come on to someone else that is, just knowing slow CW could save them or your life. It is even important to pass it on to your family members. I bet you all know how to send and receive this simple message ... --- ... ---..., the standard of the world for HELP, SOS.

So know that I got some attention here are a few ways to get into CW.

Start by learning and sending out each letter and numbers from 0 to 9.

There are computer programs to help you learn to receive these letters and numbers.

LAARK Club has a neat program that teaches you CW via a WEB connection called ZOOM and a group that helps you learn.

Start by copying slow speed ARRL.

Find another ham and get on the air with each other.

Remember it might save yours or someone’s life. For sure it will open a new world of ham radio for you. And by no means is CW dead, just take some time and go down on the lower frequency and listen. They are having a lot of fun down there, you could too.

## International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

A	• —	U	•• —
B	••••	V	•• —•
C	•• —••	W	• —••
D	••• —•	X	•• —••
E	•	Y	•• —•••
F	•• —••	Z	•• —•••
G	•• —••		
H	••••		
I	••		
J	• —•••		
K	•• —••	1	• —••••
L	••• —•	2	•• —••••
M	•• —••	3	••• —•••
N	•• —•	4	•••• —••
O	•• —••	5	•••••
P	•• —•••	6	•• —••••
Q	•• —•••	7	•• —••••
R	•• —••	8	•• —••••
S	••••	9	•• —••••
T	•• —•	0	•• —••••



Samuel Finley Breese Morse  
1791-1872

## AREA REPEATERS

<u>FREQ</u>	<u>SHIFT</u>	<u>PL</u>	<u>CALL</u>	<u>NAME</u>	<u>ALLSTAR</u>
144.9100	none	none	W5NGU-4	DCARA DIGIPEATER DENTON	
144.9900	none	none	KC5GOI	DCARA DIGIPEATER ROSSTON	
144.9900	none	none	KD5EOC-10	DCARA WL GATEWAY	
145.1700	-0.600	110.9	W5FKN	DCARA DENTON COUNTY EOC	
145.2100	-0.600	110.9	N5MJQ	METROCREST ARA CORROLLTON	
145.4000	-0.600	110.9	NETARC	GRAPEVINE	
145.4900	-0.600	85.4	WD5U	ROSSTON TOWER	41089
146.6200	0.600	110.9	N5ERS	GRAPEVINE	
146.7800	0.600	131.8	WQ5A	WISE COUNTY SKYWARN	
146.9200	-0.600	110.9	W5NGU	DCARA DENTON	41087
146.9400	-0.600	110.9	K5FTW	FT. WORTH SKYWARN	
147.3800	0.600	110.9	K5LRK	LAARK THE COLONY	47668
147.4500	-1.000	none	W5NGU-C	DCARA EOC D*STAR "C"	
147.4900	-1.000	none	KE5YAP-C	DCARA ROSSTON D*STAR "C"	
147.9700	none	none	K5YX-10	WINLINK GATEWAY	
224.0000	-1.600	110.9	K5LRK	LAARK THE COLONY	
224.2000	-1.600	110.9	KE5GDB	DCARA DENTON	43409
224.9200	-1.600	110.9	AF5RS	AF5RS	43784
440.6625	5.000	none	N5LS	DMR MARC CC1	
440.6875	5.000	none	W5NGU	ROSSTON DMR MARC CC1	
440.7125	5.000	none	KE5YAP-B	DCARA ROSSTON D*STAR "B"	
441.3250	5.000	88.5	W5NGU	PORTABLE DCARA REPEATER	
442.1750	5.000	110.9	NETARC	SOUTHLAKE	
442.6000	5.000	131.8	WQ5A	WISE COUNTY SKYWARN	
442.6500	5.000	110.9	N5MJQ	METROCREST ARA CORROLLTON	
442.7500	5.000	110.9	KA5R	TROPHY CLUB	
442.9250	5.000	none	W5NGU-B	DCARA EOC D*STAR "B"	
443.2250	5.000	110.9	N5ERS	DECATUR	
443.3000	5.000	110.9	K5LRK	LAARK C4FM ONLY	
443.5250	5.000	118.8	WA5LIE	DCARA DENTON	
443.7375	5.000	141.3	N6LXX	ROSSTON TOWER	
443.8750	5.000	110.9	NETARC	DFW AIRPORT	
444.0500	5.000	110.9	W5NGU	DCARA DENTON COUNTY EOC	
444.2250	5.000	110.9	K5CFD	COPPELL	
444.5125	5.000	123.0	KE5UT	CELINA	
444.7000	5.000	110.9	NETARC	SOUTHLAKE	
444.8500	5.000	110.9	N5ERS	GRAPEVINE	
927.0500	-25.000	110.9	W5FKN	DECATUR	
927.4125	-25.000	432.0	N5LS	DENTON	
927.6125	-25.000	110.9	W5NGU	DCARA DENTON COUNTY EOC	
927.6625	25.000	none	N5LS	DMR MARC CC1	
1253.6000	none	none	W5NGU-G	DCARA EOC D*STAR "G"	
1259.2000	none	none	KE5YAP-G	DCARA ROSSTON D*STAR "G"	
1293.2000	-20.000	none	KE5YAP-A	DCARA ROSSTON D*STAR "A"	
1293.4000	-20.000	none	W5NGU-A	DCARA EOC D*STAR "A"	



**WWV TURNS 100 YEARS OLD**  
**National Institute of Standards and Technology**  
**U.S Department of Commerce**

The WWV Centennial Committee reports that it will conduct a trial run of special event station WVoWWV over the August 24/25 weekend. Radios and antennas began arriving last week, and a tower and beam will be erected, along with several vertical antennas. WVoWWV will be set up adjacent to the WWV transmitter site in Fort Collins, Colorado. WWV turns 100 years old on October 1.

"We'll be testing band and notch filtering, in an attempt to reign in the extreme RF environment created by WWV and WWVB," said Dave Swartz, W0DAS, of the Northern Colorado Amateur Radio Club (NCARC).

The club will carry out the special event operation in conjunction with the WWV Amateur Radio Club and the National Institute of Standards and Technology (NIST), which operates WWV/WWVH/WWVB.

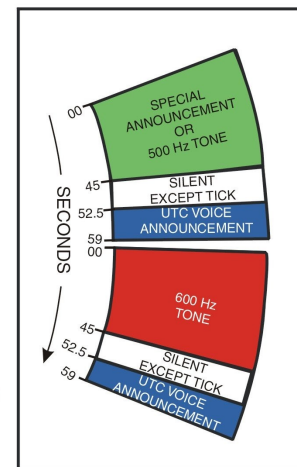
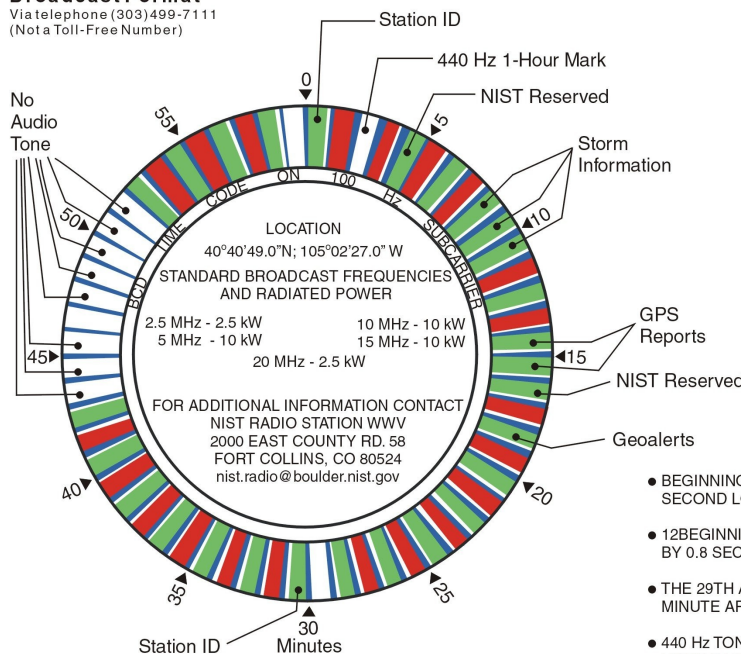
The special event site is within 1/3 of a mile of all six WWV transmitters and the 50 kW WWVB transmitter. "On-air tests will start Saturday afternoon, August 24, and run through Sunday, August 25," Swartz said, adding that organizers will post specific times and frequencies on the WWV Centennial Committee website.

The WWV Centennial special event is set to run from September 28 through October 2, and round-the-clock operation will take place on CW, SSB, and digital modes. Operations will shift among HF bands following typical propagation and will include 160 meters as well as satellites (SO-50, AO-91, and AO-92) and 6-meter meteor scatter.

Up to four stations will be on the air for routine operations. A fifth station will schedule contacts with schools, universities, and museums, as well as conducting unscheduled contacts. The additional station will periodically broadcast an AM carrier from a radio



**WWV**  
**Broadcast Format**  
 Via telephone (303) 499-7111  
 (Not a Toll-Free Number)



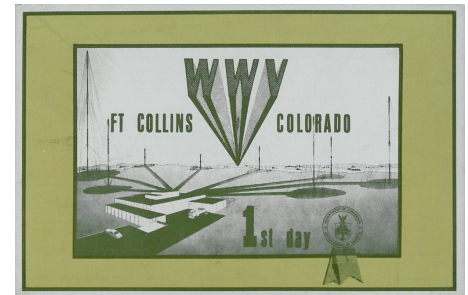
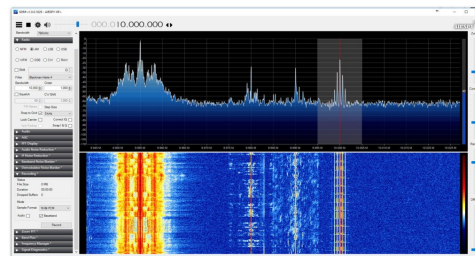
- BEGINNING OF EACH HOUR IS IDENTIFIED BY 0.8 SECOND LONG, 1500 Hz TONE.
- 12 BEGINNING OF EACH MINUTE IDENTIFIED BY 0.8 SECOND LONG, 1000 Hz TONE.
- THE 29TH AND 59TH SECOND PULSES OF EACH MINUTE ARE OMITTED.
- 440 Hz TONE IS OMITTED DURING FIRST HOUR OF EACH DAY.

locked with WWV's 10 MHz signal.

"At this point we have filled our operator's slots and met equipment goals, but we need more financial resources to cover basic operating expenses, return shipping, and site logistics," Swartz said. Members of the Amateur Radio industry have contributed equipment, including radios, amplifiers, and antennas.

NIST has announced that it will not be able to open the doors of WWV to the public for the event. "Due to a number of reasons, the scope of the formal celebration will be limited to only 100 invited participants," the WWV Centennial Committee announced. "WWoWWV will be the main public event for the centennial celebration."

Visit the WWV Centennial Committee website at <http://www100.com/> to see how you can get involved.



## What is Amateur (Ham) Radio?

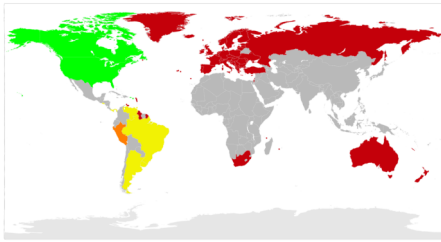
*From 2009 ARRL Handbook*

### HOBBY of DIVERSITIES

If you wrote down a list of all of the unusual, interesting things you can do as an Amateur Radio operator, you would fill a few pages. What types of people will you meet as a ham? If you walk down a city street, you'll pass men and women, girls and boys, and people of all ages, ethnic backgrounds and physical abilities. Any of them might be a ham you will meet tonight on your radio. They're office workers and students, nurses and mail carriers, engineers and truck drivers, housewives and bankers.

If you drive your car on the interstate this weekend, you'll see people on their way to a state park, a Scout camp, a convention, an airport or a computer show. The young couple going to the park to hike for the day have their hand-held ham radio transceivers in their backpacks. When they stop on a scenic hilltop for a rest, they'll pull out their radios and see how far away they can communicate with the radio's 3 watts of power. And, the radios will be handy just in case they break down on the road or lose the hiking trail.

The father and son on their way to Scout camp will soon be canoeing with their Scout troop. After setting up camp, they'll get out a portable radio, throw a wire antenna over a branch, and get on the air. Aside from the enjoyment of talking with other hams from their campsite, their radios give them the security of having reliable communication with the outside world, in case of emergency.



The family driving to the ham radio convention will spend the day talking with their ham friends, including two they've never met but know quite well from talking to them on the air every week. They will also look at new and used radio equipment, listen to a speaker talk about the latest ways computers can be used to operate on the Amateur Radio bands, and enjoy a banquet talk by a NASA astronaut who is also a ham radio operator.

The couple on the way to the airport to take a pleasure flight in their small plane has their hand-held radios in their flight bags. Once they're airborne, they'll contact hams on the ground all along their flight path. Up at 5,000 feet, they can receive and transmit over much greater distances than they can from the ground. Hams enjoy the novelty of talking to other hams in a plane. The radios are an ideal means of backup communication, too.

The two friends on their way to the computer show are discussing the best interface to use between their computers and their radios for several of the operating modes that use computers. They're looking forward to seeing a number of their ham friends who are into computers.

What other exciting things will you do on the Amateur Radio bands? You might catch yourself excitedly calling (along with 50 other hams) a Russian cosmonaut in space or a sailor on the Coast Guard's tall ship *Eagle*. You could be linked via packet radio with an Alaskan sled-dog driver, a rock star, a US legislator, a major league baseball player, a ham operating the Amateur Radio station aboard the ocean liner *Queen Mary*, an active-duty soldier, a king or someone who is building the same power supply that you are from a design in an *ARRL Handbook*.

On the other hand, a relaxing evening at home could find you in a friendly radio conversation with a ham in Frankfurt, Germany. Unlike any other hobby Amateur Radio brings the world together.



### YOUR LICENSE

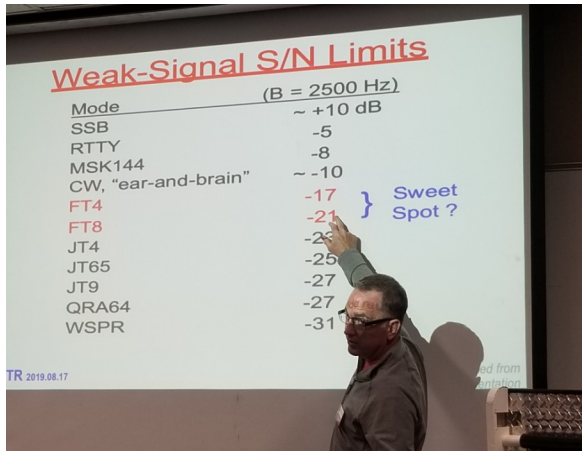
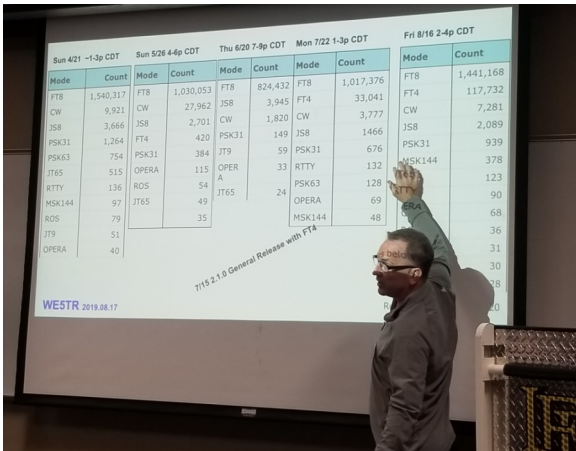
You must have a license granted by the FCC to operate an Amateur Radio station in the United States, in any of its territories and possessions, or from any vessel or aircraft registered in the United States. The FCC sets no minimum or maximum age requirement for obtaining a license, nor does it require that an applicant be a US citizen. However, US citizens are required to pass an FCC license exam to obtain a US Amateur Radio license.

An Amateur Radio license incorporates two kinds of authorization. For the individual, the license grants operator privileges in one class. The class of license the operator has earned determines these privileges. The license also authorizes the licensee to operate transmitting equipment physically present at the licensed station location. Therefore, the full license includes a class-specific *Operator license* and a *Station license*.

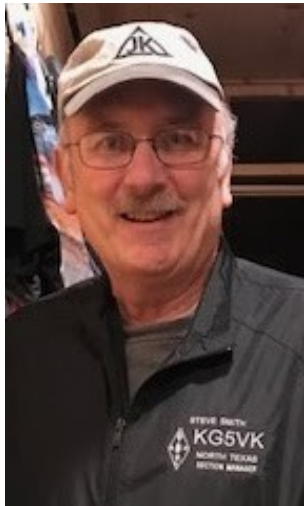
When you earn your Amateur Radio license, you receive a unique *call sign*. Many hams are known by their call signs more than by their names! All US hams get sign, a set of letters and numbers, assigned to them by the Federal Communications Commission (FCC). No one else owns your call sign — it's unique. Your Amateur Radio license with your unique call sign gives you permission to operate your Amateur Radio station on the air. US call signs begin with W, K, N or A, with some combination of letters and numbers that follow.



GALLERY



Tod Farrell, WE5TR, gave presentation on FT4 and FT8 digital modes at our August 17 club meeting.



For the September 21 LARA meeting, Steve Lott, KG5VK, ARRL North Texas Section manager will address the “positive things members can look forward to from the League as well as what the management team has been doing for members within our Section.” Steve was just elected as the section manager in February 2019, and is visiting around to area clubs. Steve is from Ben Franklin, TX in Delta County.



Fun breakfast time Saturday mornings, 8:00 am,  
*(except third Saturday)*

***Come on down!***

Korner Café  
921 W. Main St.  
Lewisville, TX 75057