



A Fresno Amateur Radio Club Newsletter April, 2019 Volume 82, Issue 4

Meeting location! East of Hwy. 41 on Shaw Av. 7 P.M. on the second Friday of the month at the University of California Center at 550 E. Shaw.



FARC General Meetings

are held the 2nd Friday of each month, 7 p.m. at the University of California Center on Shaw Ave. unless otherwise noted. Stay tuned in for new announcements.

2019 FARC BOARD MEETING DATES

1st Tuesday of each month at 2 P.M., this month at WB6VRJ's QTH

FARC Nets

Morning Drive Time Net:
Weekday mornings-7:30—8:00 a.m.

W6TO/R 146.940

FARC Net:

Sundays @ 7:00 pm
W6TO/R 146.940

Web page:

W6to.com



Dave, KA6VTA, was the main prize winner at the March meeting, winning a 2m radio. Pictured on the right are other raffle prizes.

Fresno Amateur Radio Club

January: Ken, WA6OIB, led a good presentation on the stations at W1AW, ARRL headquarters.

The February meeting had a presentation by Jim, W6NIF, who has found a way to take old computer power supplies, and make them useful for 12v 15 amp power supplies

The March program was a very interesting video on the beginnings of USA ham licensing.

The May meeting program will be presented by Pat, W6YEP, on the origins of the FARC.

The June meeting is traditionally a FD meeting. FD chairman Dennis, KI6NVG, will preside.

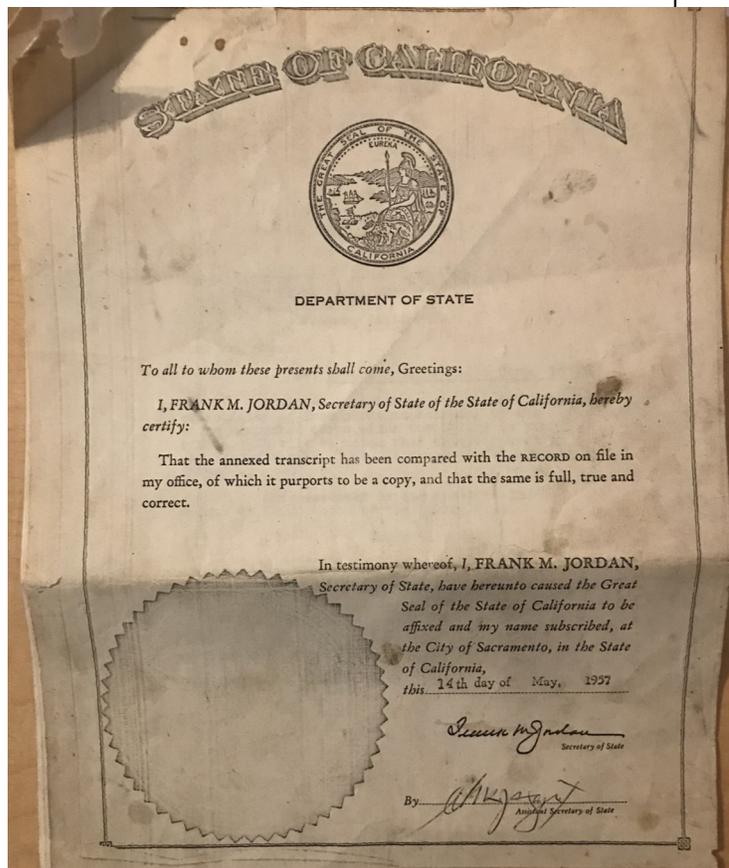
July is quite often "Old Radio and Ice Cream" night. Stay tuned to see what happens this year.

August is club picnic month, hosted in past years by WA6OIB and WA6VZM.

November meeting is a Sat. Swapmeet in place of the regular meeting.

December brings us to the banquet.

The original incorporation papers for the Fresno Amateur Radio Club will be presented at the May meeting with a talk by Pat, W6YEP, who holds the papers and knows the people who signed them. Who was W6TO? All will be revealed.



PREZ SEZ:

Well, your prez just today got new to him hearing aids. I went thru the VA. These things are electronic marvel. Yeah, this old-timer grew up with vacuum tubes, and the stuff today is amazing. They are wirelessly programmed with a computer, and wirelessly controlled by a remote controller. To package all that electronics into a small package, and have it operate is truly amazing-with vacuum tubes; I suspect it would have taken a two story house to package all that stuff!

Thanks to Lisa Hunt and Ken Holden for having such a fabulous sale of the electronic stuff that Ron Hunt had. Yeah, Ron had a bunch of stuff, and even now, he is contributing to the growth of the club. Not only an active Ham, he was also treasurer of the Club, and did a lot of outstanding things for the club, such as Field Day Chairman. Yes he will be sorely missed.



Speaking field day, we do have a chairman-Dennis, KI6NVG. He is assisted by Larry Lion, W6OWL. I hear they plan to have Field Day at Larry's establishment. I do know that Larry and Dennis will need lots of help, and those helpers should step up now. Get in touch with them, and LET'S GET READY!

See you all at the April Club Meeting!

W. Stuart Home WB6VRJ

Interesting article about solar activity from Canada's CBC:

<https://www.cbc.ca/news/technology/solar-activity-1.5049337>

A link concerning massive solar storms:

<https://www.sciencedaily.com/releases/2019/03/190311152744.htm>

The latest video from Dr. Tamitha Skov, WX6SWW, can be found at:

<https://youtu.be/TSDfL9cwzEU> .

Found on wunderground.com:

https://www.wunderground.com/cat6/Weirdly-Quiet-Sun-May-Get-Even-Quieter-and-BTW-Earth-Still-Warming?cm_ven=cat6-widget

FARC

Send your dues check to FARC, PO Box 5912, Fresno 93755-5912

Board meeting on the first Tuesday at Stu's place.

Fresno Amateur Radio Club

**AMATEUR RADIO EXAMS
IN FRESNO**

Exams given for TECHNICIAN, GENERAL, and AMATEUR EXTRA

Sponsored By the FRESNO VE TEAM

And The FRESNO AMATEUR RADIO CLUB, INC.

2019

Exams for all Amateur license classes will be conducted on the following dates in Fresno California. All exams are given on Saturday and begin at 9:30 AM.

May 18 August 17 November 16

LOCATION:St. James Episcopal Cathedral, 4147 E. Dakota, Fresno CA 93726

DIRECTIONS: This is at the northwest corner of Cedar and Dakota in Fresno. Enter the campus from Dakota. There is a large parking lot. Exams are given in Room 2.

Theory exams are multiple choice. First Class mail is used to send paperwork to ARRL, who sends data to FCC via electronic mail, thus assuring the fastest possible service on new licenses, which typically are posted to the FCC database by the end of the second week following the exam.

BRING. Two ID's, one with photo. Taxpayer ID Number (Social Security Number), or FCC Registration Number (**preferred**). Fee **\$15.00** per test session. Bring exact change. **Original and copy of Amateur License.** Talk in on 146.94 repeater.

Walk in's only, no pre-registration. More Info?? Contact Charles, (559) 431-2038

FREE Amateur Radio Technician Class

Police Science Institute will be hosting The Clovis Amateur Radio Pioneers FREE Technician Class.

This is the first level license class designed to help prepare you to take the Amateur Radio FCC exam. This class is not mandatory but is a great way to learn for the exam and hear real world experience.

Schedule

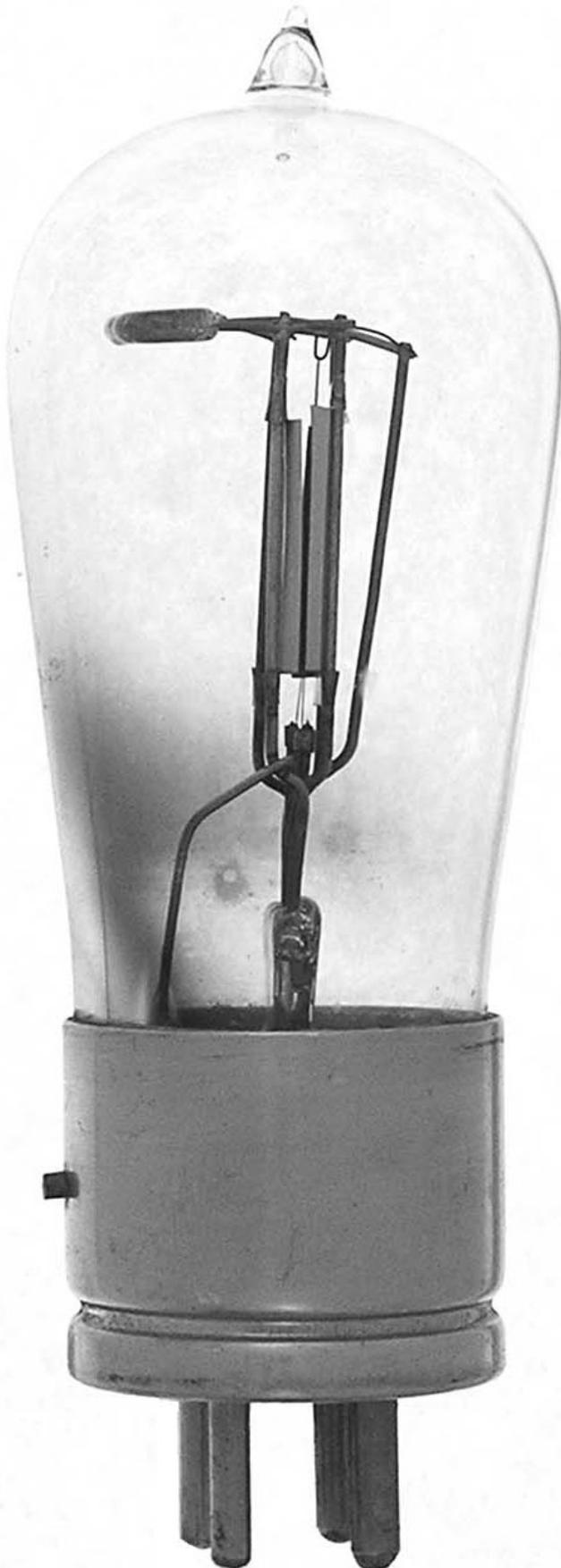
Saturday, April 13th 8AM-4PM

Saturday, April 20th 8AM-4PM

Saturday, April 27th 8AM-4PM

For questions contact Greg Waters greg@pistolrange.com

HK-5



Several years ago, I was contacted by a family who lived in a nearby town. They had several tubes they wanted to sell. The wife's father, who was a tube collector, had died. Many of the most interesting transmitting tubes had been sold before the father's death.

The remaining tubes had some valuable types, but nothing that I needed for the museum collection. I agreed to try and sell off the tubes on eBay. As I was packing up the tubes, I noticed an old tube that I thought was a rectifier and had overlooked. As soon as I examined it closely, I was amazed that such a tube had ever existed.

It was a small Gridless Gammatron that had to have been made by Heintz & Kaufman back in the early 1930s. The family insisted that I add it to my collection. Eventually, most all the tubes were sold and that family was pleased with the profit.

The Gridless Gammatrons have been the subject of some of the previous articles that I have written. See:

<http://n6jv.com/museum/articles/gammatron.pdf>.

They were designed in a way that didn't infringe on several existing patents including the triode. RCA held the triode patent and sued H&K, but H&K won in court.

If you look closely, you can see the filament mounted very close to one plate. The purpose of the Gammatron project was to develop very high power transmitting tubes. The HK-5 obviously wouldn't have much output. The only use I can imagine for this small tube would be for demonstrations of this technology. It's much easier to haul a 5 watt transmitter to a meeting than one running a KW. In my research, I have only identified 4 other HK-5s that exist in other collections.

Visit the museum at <http://n6jv.com>.

Norm

N6JV@N6JV.com

<http://N6JV.com> (Tube Museum)

Fresno Amateur Radio Club

The "TopBand" Disease

by Larry "Tree" Tyree N6TR & K7RAT Originally posted around the year 1999

Hello - my name is Larry Tyree - I have TopBand disease. It has been 14 hours since I have last worked Europe on TopBand.

Yes folks, some of my close friends and family members know this, but to the rest of you, this might be a surprise... I have the TopBand disease, and it is a bad case. I have had this disease for about 25 years now. At times it appears to be in remission, but then it comes back strong (this appears to be related to sunspots). For those of you not familiar with Amateur Radio, some background information will help you fully understand this condition. Some people in Amateur Radio call themselves "DXers". DX is a term used to indicate "far away". This manifests itself as a strong desire to "work" as many different countries as possible. After working a new country, the patient will experience a "high" similar to the one experienced by a sport fisherman when he actually catches a fish. However, after a few hours, this high is replaced with anxiety while waiting for the "QSL card" from the station worked.

These QSL cards are proof that the contact took place, look great on the wall, and are used to apply for various awards. Sometimes this anxiety can last for months. I remember having to wait EIGHT YEARS for my card from China to finally arrive. To get a card from Cuba, I had to use a friend in Europe to send it, because it appears mail between Cuba and the USA never gets delivered. Some cards never come. I have been told that getting a card from EU6AF in Belarus will probably be impossible.

DXing is the general strain of this disease. Many people have had terminal cases of it. Just last summer, George Wise, W7MB was at my house and he is one of three people at the top of the "DXCC Honor Roll" list. The Honor Roll is reserved for people who have worked the most countries, and George was at the top of the list longer than I can remember. George passed away recently and we all miss him. Being on this list generally requires a lifetime of effort (at least until packet was introduced - a computer network that allows you to share information with others concerning where and when needed countries are).

Radio hams have many different bands that they can use. Each of these bands have different characteristics. Some are night time bands, and others are only alive during the daytime. Some of the bands provide worldwide communication and others are limited to the local area (except under rare conditions). Some bands have antennas the size of your arm, and others require acres of room to have an efficient antenna.

Most hams who are trying to collect countries use bands between 7 and 30 megaHertz, on bands known as 40, 30, 20, 17, 15, 12 and 10 meters. Some stray down to 80 meters (3.5 megaHertz), but that is rare as the antennas are fairly large, there is lots of noise, and not many DX stations show up on this band. However, the "TopBand" or 160 meters, is even more of a challenge. This band, located at 1.8 megaHertz (or 1800 kiloHertz) is just above the AM broadcast band and has similar propagation characteristics as the top part of it. Listen between 1500 and 1600 kHz sometime and see what you hear. You might hear a station 1000 miles away at night, but maybe only 100 miles during the day. Yes, TopBand is a night time band and because of this, the activity peaks during the times of year when darkness is more prevalent (winter).

AM broadcast stations can run up to 50,000 watts. Radio hams can only run up to 1,500. You have seen the size of AM broadcast towers. They are typically a collection of 3 or 4 towers, each over 200 feet tall, sitting in a 20 acre lot. Radio hams who operate TopBand always drool when driving by one of these stations.

The infected operator will spend all of his mental energy figuring out how to put up an antenna system as similar as possible to the commercial AM station on their own property. Some of them actually succeed, but few of us have the resources. Because of this, there is a lot of experimentation with different antennas, much more so than on some of the other bands. Many TopBand operators use wires hanging in trees - which is how ham radio was supposed to be.

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As you can imagine, we are at a significant disadvantage compared to the average AM broadcast station. However, with enough patience and lack of sleep, we have been able to work around the world on TopBand. I am very proud of my country total on TopBand (now over 130). I have worked over 30 different countries in Europe and my furthest contacts are with South Africa (over 10,000 miles as the radio wave travels) and Perth, Australia. Contacts with Europe are more difficult because of the earth's magnetic field. Radio waves from Oregon to Europe travel pretty close to the magnetic north pole. Energy from the sun affects the Van Allen belt, which has a significant affect on TopBand signals. If you can see the Northern Lights, my radio is turned off.

Since the number of people who can put up an antenna for topband is limited, there is a feeling of fraternity among the people who you talk to. This was very strong 20 years ago, and has been diluted only a little with increased activity. You can sample the flavor of the band by reading some of the recent posts made to the [topband mail reflector](#). This is where we boast to each other about what things were worked the night before.

Perhaps I can best describe how you get this disease by explaining how I caught it. It was back in 1972. I was 18 years old and had been a ham for almost 5 years. There was a contest coming up (an event where you try to talk to as many people as you can in a weekend), and it was a 160 meter contest. I had no transmitter for this band, but I did have a receiver. I borrowed a "transmitter" from a friend (a Messinger Signal Shifter), not much of one, but it did run 5 watts (about enough to light up a flashlight). The contest started on Friday and I was able to work six states with it the first night: Arizona, California, Oregon, Washington, Utah and Idaho. I was operating in Southern California at the time.

The next day was spent trying to improve the antenna system (more wires) and the transmitter (modify my 80 meter transmitter to be an amplifier). With my improved signal, I was able to work Kentucky!! The callsign of the station I worked was K4GSU, who is now N4AR, and I hear him on TopBand almost every night 25 years later. He obviously has a bad case as well.

More improvements were made, and I finally worked all states from my parent's suburban lot in Southern California. My antenna wire was made out of invisible 30 gauge wire and was strung across the street to a telephone pole (bet you didn't know about that one dad).

A few years later, a friend of mine (Marty Woll, WB6VZI/N6VI) and I, went to my parent's mountain cabin for some 160 meter contests. We strung antennas at the top of the 100 foot trees and were able to work Japan! One of the callsigns we worked was JA3ONB - who I actually worked this morning on 2 January 1997. He is obviously another poor soul who has this disease.

When I moved to Oregon, I finally was able to put up a "proper" TopBand antenna. David, AA6RX, was visiting me and we modified one of my towers to act like an antenna for 160 meters. The results were surprising. We worked several station in Japan the next morning, and in the winter of 1985/86, I heard my first European! I can still remember hearing the letters "9AMO" which were coming from Pierre, HB9AMO in Geneva. I didn't work Pierre (until 11 years later), but soon after I worked Jose, EA3VY (Spain), for my first European country. It was followed shortly by Dave, G3SZA (England), who now lives in Colorado. I remember one night the next October (like it was yesterday) where I worked FOUR new European countries in one evening: including Finland (OH1XX). All of these people mentioned have been heard on topband by myself in the past week or two.

Perhaps I should now explain the symptoms of the disease. They are as follows:

- Desire to be on the radio at sunrise.
- Desire to be on the radio at sunset.
- Desire to be on the radio at all times in between Sunset and Sunrise.
- Desire to struggle for months to work a single station in a new country. In extreme cases, this might go on for more than a year. A good example is Riki, 4X4NJ in Israel who tried for two years to finish off working all the states in USA.
- Never being satisfied with the antenna system and constantly trying new ones.

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- Only comes down to see the family after working a new country (to gloat). During the rare fantastic opening, will come down after each new country and hold up fingers indicating how many new countries were worked so far. These events are equivalent to multiple orgasms, and occur about once or twice in a century.
 - Drinks lots of water before going to bed with the sole purpose of waking up in the wee hours of the morning to see if a new country can be found.
 - Has problems getting to work on time during the winter months.
 - Sends equipment and wire to people in unworked countries, hoping that the end result will be their QSL card on the wall.
- Spends thousands of dollars going to rare countries just so other people can work it. This is a problem, as they don't get credit for the country themselves!!

If these symptoms persist for more than one sunspot cycle (every 11 years), then you should strongly suspect TopBand disease.

Currently, the only known cure for symptoms of the disease is exposure to lots of sunspots. This increases the absorption of TopBand signals in the ionosphere, and also makes the higher bands more attractive. Most people (except those with very bad cases) will spend time on the less masochistic bands when high sunspots are present.

Please understand, this only treats the symptoms, not the root cause. It is possible for the disease to go into hiding for a number of years. Earl, K6SE, had the symptoms really bad in the 1970's. Then he was not heard from for almost 15 years. I had thought about looking him up to see if he had found a cure, but I heard him just a couple of nights ago trying to work a station in Sweden.

If you know someone who has this disease, don't invite them over to any dinner parties during the months of December or January. They will constantly be looking at their watch, and using your computer to log into the packet cluster to see what stations have been reported on the band. If you know someone married to a person who has the disease, it is okay to invite them over (alone). This will be greatly appreciated by the TopBand addict and will be repaid during the summertime with equal kindness.

For further information on TopBand, subscribe to the topband mailing list. Send a subscribe message to topband-request@contesting.com. You can also view the messages posted to this support group at http://www.contesting.com/_topband.

There are other strains of the disease which I should mention. The symptoms are equally devastating:

- Moon bounce - communicating by bouncing signals off the moon.
- VHF/UHF DXing - using frequencies similar to your TV.

QRP - limiting your output power so people can't hear you very well - good for sadists too.

If you are thinking of exposing yourself to TopBand, you should be aware of the risks. You might find yourself only valuing your 40 meter beam as top loading for your tower.

Thanks for listening.

Fresno Amateur Radio Club

Local Amateur Radio Repeaters

<i>Organization</i>	<i>Call Sign</i>	<i>Frequency</i>	<i>Offset</i>	<i>PL</i>
CARP	K6ARP	147.675	-	141.3
CARP	N6JXL	224.380	-	141.3
CARP	K6ARP	444.725	+	141.3
CARP	NI6M	440.350	+	141.3
CONDOR	WB6BRU	224.900	-	156.7
FARC	W6TO	146.940	-	141.3
FARC	W6TO	223.940	-	141.3
FARC	W6TO	444.200	+	141.3
BRA	W6FSC	145.230	-	141.3
BRA	W6FSC	443.450	+	141.3
KINGS ARC	N6CVC	145.110/444.95	-	100.0
NC9RS	NC9RS	927.6625/902.0125	-	146.2
MADERA ARC	W6WGZ	147.180	+	146.2
MADERA ARC	W6WGZ	441.175	+	146.2
QCWA	WQ6CWA	146.850	-	141.3
QCWA	WQ6CWA	443.250	+	107.2
RACES	N6HEW	147.150	+	141.3
SJVARs	KE6JZ	146.820	-	141.3
TURLOCK ARC	W6BXN	147.030	+	100.0
CVRC	K6WGJ Fresno Low	145.43	+	141.3
CVRC	N6VRC Meadow	147.165	+	141.3
CVRC	N6VRC Meadow	440.025	+	141.3
CVRC	N6VRC Santa Rita	147.285	+	141.3
CVRC	N6VRC Santa Rita	442.275	+	141.3
CVRC	N6VRC Visalia	442.525	+	141.3
CRVC	N6VRC Porterville	443.825	+	141.3
CVRC	K6WGJ Fresno Low	444.975	+	141.3
CVRC	N6VRC Bear Mt.	443.950	+	141.3
CVRC	N6VRC Mt. Bullion	442.350	+	141.3
CVRC	Bear	927.05	+	141.3
Meadow Lakes	WA6OIB	146.61	-	141.3
WA6IPZ	WA6IPZ	52.84	-	82.5

Remember to keep you dues current for both the attendance prize and the birthday and anniversary listings.

Birthdays

4/10 Perry K6XJ

Anniversaries

None listed

Ten meter net, CW and Phone, every Wednesday

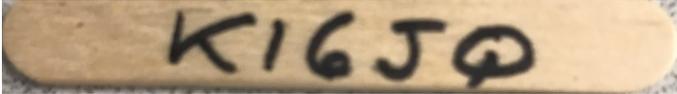
7 P.M. for CW at 28.140

8 P.M. for SSB at 28.445

This is a local net, the cw part run by KF6ZXO, and the SSB with various net control ops.. Have fun checking in on one or both modes.

The monthly attendance prize!

The attendance prize was won by KI6JQ, who was not present. Must be present to win. Next drawing will be \$30, at the April meeting.




THE DX CORNER

By Charles McConnell W6DPD

April 2019

"DX is the one you want but you don't have. That is the way it has always been, that is the way it will always be."

Of the most recent DXpeditions, "If you worked it, it was the best DXpedition ever. If you missed it, it was probably not so good." "And so it goes."

All things are relative, some more than others. Thanks Hugh Cassidy, WA6AUD SK.

If you want help with DX, you can contact the local members of the Central California DX Club for some assistance. Charles W6DPD 431-2038, or Perry K6XJ 299-2802, can give you advice. The big thing about finding DX is to tune the bands.

The DX Breakfast is every Saturday at Jeb's Blueberry Hill Café, 3851 N. Blackstone Ave in Fresno. This group gathers about 06:30 AM. All are welcome.

Check out www.spaceweather.com and www.solarham.net for information on the solar cycle. The higher the solar flux and the lower the A and K Indices, the better the band conditions. As the solar cycle heads toward the minimum by the end of the decade, working DX becomes more of a challenge. The high bands become less useful until the solar cycle heads toward the maximum, some years from now. There were over 100 sunspot free days in 2017

The address of the Sixth District QSL Bureau is P. O. Box 970, Fairfax CA 94978-0970. You can send up to 10 address labels and \$0.80 for each envelope to the address above. They will put 1 unit of First Class postage on the envelope. You can contribute \$10 or \$20 online using Paypal. If you work DX, you should have envelopes at the bureau so you can get your cards. You may be able to check your status at the bureau at <http://www.qslbureau.org/>

The ARRL Outgoing QSL Service has raised the rates, effective November 1, 2016, for sending ARRL members QSL cards to foreign countries. The new rate is \$1.15 per ounce, about 10 cards. There is now a \$7.00 transaction fee for each submission. Sending one ounce of cards (about 10) will now cost \$8.15. Ten ounces of cards would cost \$11.50 plus \$7.00.

Overseas postage is still \$1.15 per ounce. Domestic postage is \$0.55 for 1 ounce. Additional ounce for domestic mail will go from \$0.21 to \$0.15. Postcards stay \$0.35. Postage for flat rate boxes and envelopes will increase.

If you don't get a DX Bulletin and you belong to ARRL, you should register on the members only web page and check the box for the ARRL DX Bulletin. This one is emailed each Thursday. Or you can go to the ARRL web page in the News/ Bulletin section and view the bulletins there.

You can also read the OPDX Bulletin or the 425 DX Bulletin on the web. Search OPDX Bulletin or 425 DX Bulletin to get the URL. You can subscribe to the Daily DX, or Weekly DX. These bulletins will keep you informed of DX operations and QSL information.

Fresno Amateur Radio Club

Continued from the last page

The following operations are scheduled:

Sudan **ST2NH** is learning FT8 and is active
Bouvet **3Y0I** Maybe soon/ Team is preparing to leave.
Djibouti **J28PJ** for 3 to 5 years
Ascension Island **ZD8AC** now for 2 years
Senegal **6W1SU** now for 2 to 3 years
Rwanda **9X0TA** August 5, 2017 for 3 years
Rwanda **9X9PJ** now for 2 years
Antarctica **VK0HZ** Davis Station for 1 year
Antarctica **ZL5A** Scott Base for 1 year
The Gambia **C5DL** April 1 to April 15, 2019
Madagascar **5R8PX** August 3 to August 17, 2019
Panama **H31A** now through August 15, 2019
Vietnam **3W9JF** February 9 to March 6 and March 16 to April 6, 2019
Chad **TT8RR** March 2019 **POSPONED DUE TO SECURITY ISSUES**
Senegal 6W7/F6HM March 19 to April 20, 2019
West Malaysia **9M19TEA** March 27 to April 27, 2019
Norfolk Island **VK9NI** April 1 to April 14, 2019
Burkina Faso **XT2AW** April 7 to April 26, 2019
Rotuma Island **3D2AG/R** April 2019
St. Paul Island **CY9C** August 2019
Tristan da Cunha and Gough **ZD9EI?** September/October 2019
St. Pierre and Miquelon Island **FP/KV1J** September 24 to October 8, 2019
Uganda **5X0T** September/October 2019
North Cook Islands **E51GC** October 10 to October 28, 2019
Pitcairn Island **VP6R** October 18 to November 1, 2019
Tokelau **ZK3** September 25 to October 16, 2019
Western Kirabati **T30GC** October 30 to November 15, 2019
Vietnam **XV9D** November 17 to November 30, 2-19
Sable Island **CY0** postponed to 2020
South Orkney Isl **VP8?** February 20 to March 5, 2020



Charles, W6DPD

Watch the DX Bulletins for up to date information. As the time for the operation is at hand, watch the DX Summit (www.newdxsummit.fi) for listings.

There are a number of state QSO parties each year. Check the contest corral in QST or the ARRL web page. State QSO parties are a good place to collect states for your Worked All States award. Good luck, tune the dial, and listen.

The next meeting of the CCDXC will be May 25, 2019, at 11:30 AM at Apple Annie's in Tulare CA.

22 Different Wire Antennas for the 160 Meter Band:

<https://topbandhams.com/tech-page/6-22-different?fbclid=IwAR3fDsrX8-NuzzyyLtd51CWEGg5-mBuTEiA8R5AqyoTO1oKOkTwy91aCTPk>

Fresno Amateur Radio Club



EC Report for March 2019

The schedule for the month of March, 2019, was 1 Monthly F.C. EmComm Meeting, 4 Monday Night Nets, 2 Message Handling Practices, 1 EmComm & Coffee, and 1 Public Service Event.

ARES Traffic Practice

Fresno ARES/RACES is conducting an on-the-air Traffic Handling practice twice a month after our regular Monday night EmComm Nets. Brian has been sending a message using the ARRL Message Form. After the practice the copied message was emailed to Brian to check accuracy and log your time on ARES Connect.

The practice will continue after the nets so join us and have some fun.

EmComm Website

We are now posting events and meetings on the calendar as well as posting articles on the home page. There is a lot of new information and links added to the site as well thanks to our **Webmaster Brian (K6OGR)**. Check us out at fcmcomm.org

FC EmComm Website Report

Here are the website, Facebook, and ARES Connect reports for March.

Website: 116 visits 288 page views- 87 direct visits- 19 redirects from successful search returns- 5 redirects from social media

Facebook page: 0 Page views 0 Page previews 31 People reached 13 Post engagements

ARES Connect: New members: 1

Net participation:- Winlink Check in-- 6 Average participants-- 7 Peak participants

- Weekly net-- 17 Average participants-- 18 Peak participants

- Message copy practice-9 Average participants-10 Peak participants Totals- 112 participants- 43.5 hours

- Training participation /K6OGR - Brian

FC EmComm FB Page

We have a Fresno County EmComm presence on Facebook. There you can find posts related to local events and emergencies. To access it, search for [@fcmcomm.org](https://www.facebook.com/fcmcomm.org) on Facebook, or you can click on the Facebook icon at the bottom of the web site at <https://fcmcomm.org>. It is just a page so there is no membership to join. To keep up to date you just need to like and follow.

Upcoming Emcomm Service Events

As you know we assist CARP with their Public Service Events and use them as a training venue. We have two coming up in April (April 6 – California Classic Bicycle Ride and Hinds Hospice Angel Babies Walk on the 13th). Please consider helping with these events, they are not only a great training venue but a lot of fun. After you sign up, please go to ARES Connect and check the events on the calendar so you will get your time logged onto ARES Connect when you participate. We hope you take these opportunities to tune your traffic handling skills as well as having a great time.

CARP just announced the new calendar for the 2019 events we will be assisting them with. It will be uploaded onto our website.

Fresno Amateur Radio Club

2019 EMCOMM EVENTS

April 6, 2019 – California Classic Bicycle Ride – Sign up

April 13, 2019 – Hinds Hospice Angel Babies Walk

May 4, 2019 – FCC Kirch Flat Bicycle Ride – Sign up

June 22, 2019 – FCC Climb to Kaiser Bicycle Ride – Sign up

September xx, 2019 – Tour de Fresno Bicycle Ride

October 5, 2019 – North Fork Grizzly Century (not confirmed)

October 12, 2019 – FCC Bass Lake Double Century Bicycle Ride – Sign up

November xx, 2019 – FCC Raymond Gravel Grinder Ride -- If you are interested and want to sign up for one or more events please go to the CARP Website (k6arp.org) and go to their sign up link.

A Little Hummer:



Any of you old enough to remember Mad Magazine's Alfred E. Newman?

New Digital Mode

I received the following information via email from Grady Williams (K6IXA) that he sent to the members of the W6BXN Repeater Group and the Atwater Amateur Radio Club. He describes the mode way better than I ever would be able to so I will pass it on.

Sound Card Modems

In the past few years there has been an increased interest especially in the ARES, RACES Emcomm community in the implementation of various means of data transmission utilizing the new technology in and around sound card Modems.. All of the smarts is in computer software instead of a hardware modem to process the data... Various hardware modems vary from \$150 on the low end packet modem up to \$1800 for the SCS P4 Dragon DR-7800... The DR-7800 is still the BEST most reliable in weak signal device out there but as you can see it comes with a price...However variants of virtual (lives in computer software) modems are beginning to rival the DR-7800 when cost is considered...

For the most part sound card modem technology began with the development of PSK-31 and took off from there like wild fire even to encompass and replace our beloved thousand pound accumulation of Teletype Equipment not to mention FLDIGI and all of its variants....

Fresno Amateur Radio Club

Currently Amateurs, Government, Em-comm, NGO organizations are ALL embracing the Winlink System for the conveyance of information in a radio email system compatible with the existing internet concept... With all of this new sound card based communications technology a reliable interface between the users computer and radio becomes essential...

Any of these computer based digital communication programs can interface the computer and radio utilizing the existing computer internal sound card using the mic and earphone jack... However isolation in the form of a transformer is desirable. In addition levels set for communication needs become subject to changing from a preset level when computer is used by Skype and other voice utilized programs... Consequently a stand-alone external sound card device with manual control knobs becomes very desirable in that it can be manipulated irrespective of the computers internal sound card needs...

The External Sound Card device recommended by most program developers is the TigerTronics Signalink USB... External transmit and receive level pots set your desired levels... Also there is a vox keying circuit in that some programs do NOT provide keying circuit via a serial port. This device will work with ALL sound card programs, providing correct levels, equipment isolation avoiding ground loop distortion and appropriate vox keying where needed... There are less expensive devices but not sure they are of the same quality, have vox keying and have the flexibility of connectivity for all of the amateur radio equipment out there...

The Winlink System as previously now offers a plethora of digital modes to connect to the system with. On HF, you have Winmore, Ardop and Iridium all available with the sound card interface. With utilization of virtual (software) modems such as direwolf you can operate packet in it's various formats on VHF and UHF... The latest BIG addition the the technology is VARA FM developed by EA5HVK Jose in Spain... Allows packet operation without a hardware modem at about 10 times the thru-put of conventional packet. NOTE: Basic Vara HF and FM comes with a slower thru-put... Jose gets \$65 to license an installation keyed to your call-sign and suffixes, -10, -11 etc... With this upgrade the data thru-put really smokes and NO expensive modem...

Time to cut to the chase... I am prepared as soon as time and finances permit to equip my existing pactor and packet nodes with the capability of utilizing these new digital modes on the same equipment and frequencies... With VARA FM you can utilize existing K6IXA vhf gateways with packet or Vara fm... My existing Pactor 1,2 &3 Gateways on 20, 30 & 40 meters will also offer the connect option of VARA, ARDOP & WINMORE... The Winlink Express program that supports all of these modes, has a pull-down menu with all of the station gateways supporting the various modes... Click on that station, the frequency is changed in the radio, antenna tuned and you are ready to hit the start button. Winlink Express also contains all of the templates currently in use in the Em-Comm community... Using a commonly used template allows you to place data in the various fields. When the message is transmitted only the data is transmitted and then re inserted in the form at the other end for distribution or printing.

ARES and Relevant Threats - Atmospheric River Storm"

In 1861 and '62, an unprecedented storm struck California, flooding a vast portion of the state in up to ten feet of water. This storm was the result of an "atmospheric river", and it is not a freak event, but rather six similar storms have been identified in the geologic record for California. This is California's other "Big One", besides an earthquake. The relevance to ARES, here in the Central Valley, is that some kind of significant flooding event is actually more likely for us, then the immediate effects of an earthquake. We've talked many times about mutual aid and assistance to other ARES groups, responding to an earthquake on the coast. However, significant flooding is a real and potential risk to all of us in the Central Valley.

The link accompanying this short article is to the United States Geological Survey (USGS) ARkStorm Scenario summary. I highly recommend we all at least read the summary, and begin considering how we can integrate that into our awareness and response planning."

https://www.usgs.gov/natural-hazards/science-application-risk-reduction/science/arkstorm-scenario?qt-science_center_objects=0#qt-science_center_objects

Regards, Chris KJ6OUG

Fresno Amateur Radio Club

We Need Your Input!

We have started our Steering Committee up again. We are looking for ideas for projects, training events, etc. that would promote interest and participation of our members. If you have any ideas, please email me. We will do our best to make this a more interesting, efficient, and enjoyable organization.



EmComm meeting place: Hinds Hospice Building at 2490 W. Shaw Ave. Fresno. The time is 19:00 hr. please arrive a little early for we have to be escorted in for this is a secured building.

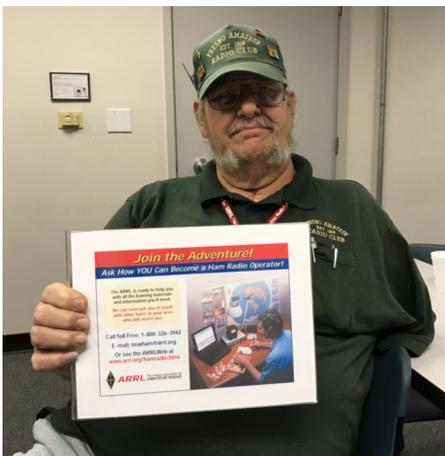
Net Control Staff Needed

We are looking for volunteers to take a turn as net control on Monday nights. This is not a difficult task. We will provide the preamble and net roster. This is a great way to enhance your skills running a net for emergency situations. If you are interested, please contact Gary (KI6OYW) at 559-269-1340 or email g_greenberg@att.net

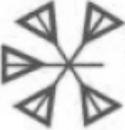
Our Calendar

Don't forget the **Monday Night EmComm Net** at 19:30 hr. on the 147.15 MHz PI 141.3. We have some good information and camaraderie. On the third Friday of the month there is the **EmComm & Coffee** located at Denny's, 39 W. Herndon Ave (North East corner of Blackstone and Herndon) 07:00hr. And last but not least the EmComm Meetings are held on the Fourth Thursday of month at the **Hinds Hospice Building, 2490 W. Shaw Fresno.**

Best of 73's
GLEN CAINE (N6HEW)
Fresno County ARES EC/ RACES Officer
559-999-7590
N6HEW2@gmail.com



Dan, AE6SX, our SJV section manager, is always ready to promote the ARRL.

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Jeff, WB6ZBX, is working on a new project, a Collins 30K-4. There were less than one hundred made. The 30K-1 was a ham band amplifier, CW and AM, while the 30K-(2-5) were commercial and military versions. This one has a Navy sticker on it.

Jeff is restoring it, and will put it on 160 and 80 meters, with a 310-B Collins exciter.

He has all the tubes except two 75TH tubes, which he is looking for. 100TH tubes could be used with a little bias adjustment.

The unit dates from around 1949-1952.



Fresno Amateur Radio Club (FARC) Membership Application

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Birthday (Month/Day) _____ Wedding Anniversary (Month/Day) _____

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