



**FARC General Meeting On the Air
Second Friday at 7 P.M. on the W6TO repeaters**

FARC BOARD MEETING DATES
The 1st Tuesday of the month

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

Join us on the second Friday of the month for an on the air meeting at 7 P.M.!

No physical meetings at the moment– stay tuned in on the club repeater!
Meeting at 7 P.M. Feb. 12, on the club repeaters!

2021 membership dues:

The board has voted that any paid up 2020 member will be considered paid also for 2021, as our expenses have been lighter during this pandemic time.

The Fresno ARC would also encourage new members to fill out the form on the last page of any Skip. New members are at last year's rate.

Lew WB6YFW sends this picture with the note "What is this?"

Go to page 9 to find the answer.

Many great comments on last months story by Greg KM6GSO! The February on-the-air meeting will have a short program by Greg!

Go to w6to.com to re-read the Jan. Skip. There will be time for Greg to talk about how he wrote the article and have some questions and answers.



In this issue there is a great presentation about end fed dipoles by Brian KM6ZM who is checking to see if he can be our March program speaker, depending on his work schedule.. Read about it this month and talk to him next month!

More programs coming! Do you have something to write about? Think about sharing it with the club.

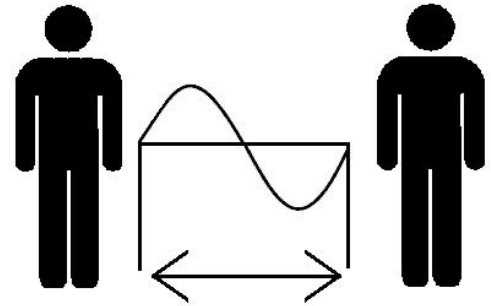
UC Merced center is closed for the rest of 2020. On the air meetings until the COVID 19 is under control.

Last month we had pictures of "Straight Key Night", and that was the short topic for the January FARC on-the-air meeting.

Below is the favorite straight key for John K6MI, who did make some qso's with it during SKN, and found out his fist wasn't quite as good as he remembered.

Ken WA6OIB got on the air with a Ranger and a Drake 2b on 40M and enjoyed great rag chews.

Social Distancing



**Keep one wavelength
apart at 146.52 MHz**

Work in the world on 40 CW. Happy New Year!



Ken WA6OIB

Club meeting on-the-air Feb. 12, 7 P.M. With a short program and question and answer. Tune in on the W6TO repeaters!

FARC– New Members! 2020 members are already paid for 2021!
Send your dues check to FARC, PO Box 5912, Fresno 93755-5912
Board meeting on the first Tuesday of the month. Details from Stu, WB6VRJ

Brian Moore KM6ZX

End-Fed Half Wave Antenna Or Just Another Dipole???

The very first antenna I used to get on the air as a new ham radio operator was an End-Fed Half-Wave (EFHW) antenna that I made from a QRP-Guys kit. I bought it because the catalog said it didn't need a tuner and only cost \$15. Since then, I have read up on antenna theory, and constructed many types of antennas. I improved on my setup whenever possible. I think at this point my main antenna, a semi-permanent 40m EFHW, is running about as efficiently as possible given the constraints of my installation. It's performance on 40m is equivalent to a center-fed dipole, with the advantages that it can be used on all the harmonic frequencies, and that the feed point is at my house window, and not midway down the antenna in my front lawn. I hope to highlight some of my lessons learned so that you would want to try building and using an EFHW antenna.

So why use an EFHW instead of a standard dipole? Well the EFHW does offer some advantages.

1. Ease of installation, only a single high point needed.
2. Low SWR on all even and odd harmonics. Antenna can be used as a multi-band antenna. Important note: when using an EFHW on a harmonic frequency, the radiation pattern will be different than that of a dipole. See figure 1.
3. Many configurations possible, horizontal, vertical, sloper, inverted V, inverted L, etc. See figure 2.
4. No hanging feed line, feed point near the ground.
5. One single length adjustment, no interactions between the bands.

So what some of the disadvantages?

1. You need a transformer to match the feed line to the antenna. A poorly-constructed transformer will be highly inefficient and cause significant signal loss. Even a well-constructed transformer will have some signal loss, but under actual field conditions will not be perceptible.
2. Common mode current. The end-fed antenna always has a counterpoise. If you don't provide a counterpoise, the shield of your

feed line will become one. An RF choke may be needed in some cases.

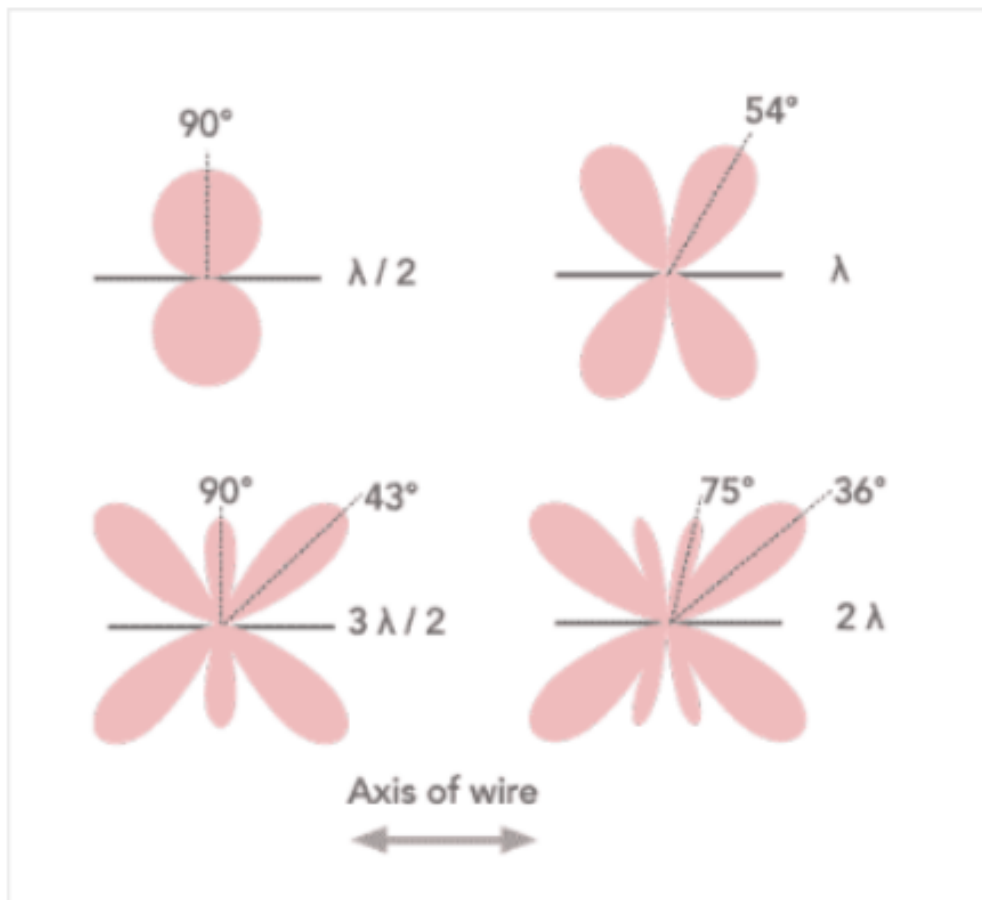


Figure 1: EFHW Radiation Patterns On Different Harmonics,
Reference 7

I have made several EFHW antennas for both portable use and as a semi-permanent setup. For portable use, it's easy to bring along separate wires for each band you plan on working on. You will always have an optimal no-compromise antenna and will never need a tuner.

For fixed use at home, I am limited to just using one antenna at a time, so I operate the same 40m antenna on 80, 40, 20, 17, and 15 meters, and have had successful QSOs on all these bands. Again note that the radiation patterns on the higher bands are different than on the primary band, see figure 1. Also I use a small compensating coil to keep the resonant point on the higher frequency bands in the lower CW portion of those bands,

see figure 5. Otherwise the resonant point (lowest SWR) drifts upwards on each higher band.

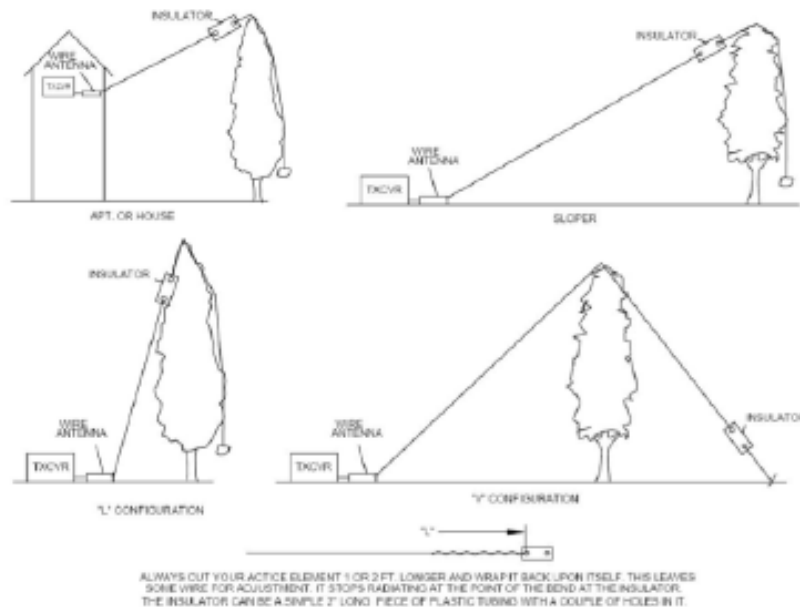


Figure 2: Possible EFHW Antenna Installations (Reference 5)

My Best-Practices Setup

Matching transformer: For 10 W or less, I use a single FT140-43 core and 16 gage wire for the windings, see figure 3. QRP-Guys offers this same exact transformer in kit form, see reference 5. According to reference 1, my transformer's efficiency should be between 81 and 87%. For 100W, use two FT240-43 cores stacked and 14 gage wire, according to reference 1, the efficiency should be 84 to 88%.

Do not use a Type 61 ferrite core, or any powdered -2 or -6 cores. Those cores are used in several common random wire transformers, such as the 9:1 UNUN. In this case, their primary inductance is too low for an EFHW and will not work. Also do not wrap the core in insulating tape, coat the wires in silicone shielding, etc. The increased air gap will decrease efficiency.

I use a 100 pF high-voltage capacitor across the primary winding of the UNUN to compensate for leakage. This improves performance at higher frequencies, reference 1. Otherwise SWR would increase with the frequency.



Figure 3: Matching Transformer 49:1 for QRP. Note counterpoise wire.

RF Choke Balun: This is not always necessary but is useful if common mode current causes problems. I used a single FT140-43 core and 8 turns of RG-174 coaxial cable, see figure 4. Always put the choke at the radio end of the feed line, otherwise the antenna might not have a sufficient counterpoise and won't work properly. Reference 6 has the instructions to build my RF choke.

Counterpoise: The end-fed antenna always has a counterpoise. By providing a separate counterpoise wire at the transformer, I minimize the common mode current on my feed line. A counterpoise length equal to $.05 \lambda$ is all that is needed, see reference 3. My 40m antenna has a 2m counterpoise wire.

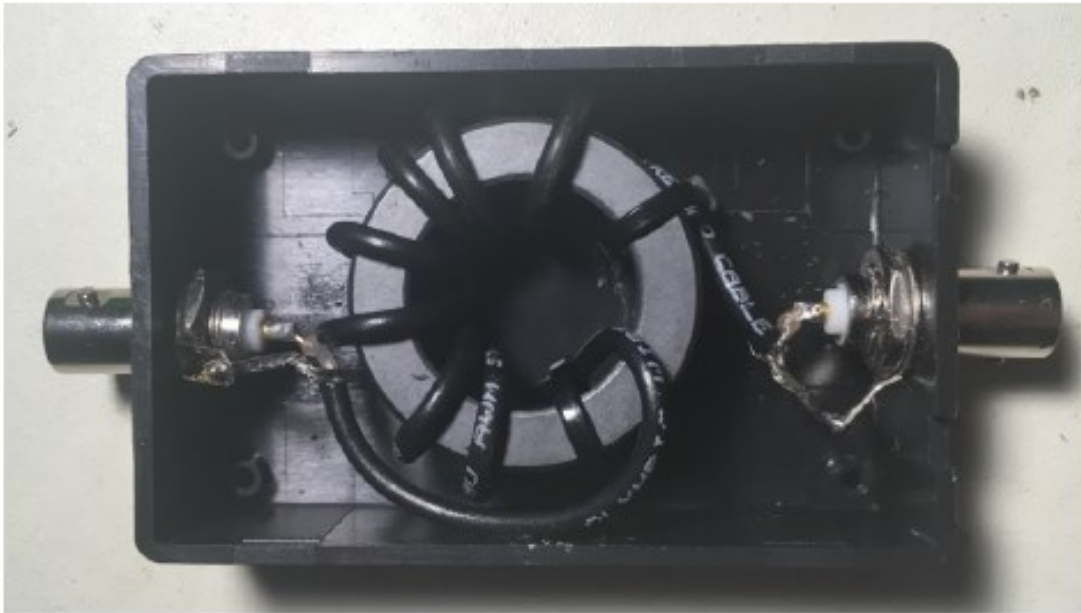


Figure 4: RF Choke Balun for QRP

Compensating Coil: Since I use my 40m antenna on the harmonic bands, it has a compensating coil about 78 inches from the feed point, see reference 4. The purpose of the coil is to compensate the resonant point when driving the antenna on higher bands, i.e. 20 / 15 / 10 m. It is not needed if you're not going to use multiple bands on the same antenna. See figure 5.



Figure 5: Compensating Coil - It's Not A Trap!!!

Conclusions

The EFHW is a simple, easy-to-construct antenna that can achieve the similar performance to a dipole while offering greater flexibility. For field or EMCON use, the EFHW is in my opinion one of the most versatile antennas available. There is no magic antenna that does it all, all the time, but EFHW can come close as long as you understand its capabilities and limitations. Since building my first 40m EFHW antenna, I have continued to research the topic and made gradual improvements to my antenna system. Although the solar cycle is starting to pick up, and the bands are beginning to open, I think much of my recent success is due to the improvements I made to my EFHW antenna system. For a beginning radio operator, or someone who is just getting started in HF, the EFHW is a great antenna to start with as it has the versatility to explore the bands and make successful QSOs.

73,

Brian Moore
KM6ZX

Resources

1. Great General Resource on EFHW Construction: <http://gnarc.org/wp-content/uploads/The-End-Fed-Half-Wave-Antenna.pdf>
2. Radio Prepper End-Fed Antennas: <https://youtu.be/0zF7bDoqkG4>
3. EFHW Theory: https://www.nonstopsystems.com/radio/frank_radio_antenna_multiband_end-fed.htm
4. EFHW Compensation Coil Experiments: <https://www.youtube.com/watch?v=Z7-FYm6r5jc>
5. QRP-Guys EFHW Instruction Manual: https://qrpguys.com/wp-content/uploads/2020/10/mini_notune_assy_102120.pdf
6. Radio Prepper How to Build an RF Choke: https://www.youtube.com/watch?v=gl_aByCV8KQ&t=2s
7. EFHW Radiation Patterns: <https://www.electronics-notes.com/articles/antennas-propagation/end-fed-wire-antenna/multiband-end-fed-half-wave-efhw-antenna.php>

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.**

2021

All dates cancelled at this time, due to the location not being available.



Page one is a picture of what caused my well pump to stop working!

Looking at the first picture I wouldn't know what it was... the wire going up to this was perfect.

Second is a view from the other end! Somehow the insulation became compromised and the copper conductor contacted the metal casing.

It must have been quite a show down there to melt the rest of the insulation. Lou WB6YFW

Social distancing during the recent vhf contest in January. Pictured in the four front is the K6MI van with bay doors open ready for contacts from 6m up to 122g.

Behind, at the Covid safe distance is N6NB, also with 11 radios. The biggest trick is to pick up the correct microphone for the band you are on.

This is a grid square corner for DM06 and CM96.



Stolen sports terminology:

Howdy from Joe's Place... **Who says Ham Radio ain't a Sport?**

Our hobby is a sport. I have proof. Just take a look at all the clichés they have “borrowed” from us:

- 1) “Let’s get on the same page” is obviously a verbal exchange between an operator and his logger at Field Day.
Football teams now use it in reference to pages in a play book.
- 2) We all know that “First down and ten to go” simply means that the first of eleven Field Day antennas has been taken down.
We also know how the NFL uses it.
Is it a coincidence that both we and the NFL use it on Sundays?
- 3) “What’s the count?” is just one contester asking another what his QSO total is so far. That one’s so old that I’m betting “The Babe” stole it from Hiram Percy Maxim.
- 4) A “Squeeze play” refers to a technique that an amateur operator uses when trying to find a spot to call “CQ Contest” on a band that is so crowded that he needs a ginsu knife to make room. Baseball adopted that one for use in a bunt situation where the batter is trying to move his teammate ahead one base.
- 5) A “Suicide Squeeze play” is similar to number 4 except that the operator chose a frequency between two stations, each of which is running a kilowatt to stacked yagis. In baseball, it’s also similar to number 4, except that if the batter can’t bunt the ball, his teammate will absolutely be tagged out at home plate.

(Why don’t baseball people call it a “Homicide Squeeze Play”?)
- 6) “He popped out” of course refers to a weak station’s signal suddenly becoming copyable above the background noise in your receiver. We all know how baseball uses it.
- 7) A “Grounded out” signal is a bad thing. It’s bad in baseball too.
- 8) A “Base” properly refers to a home or fixed-location station.
In baseball, a base is just a bag filled with sand.
- 9) We know that “Drive” refers to how much power your transmitter is outputting to your antenna or amplifier.
Basketball demeaned the term to just mean dribbling the ball on your way to the basket.
- 10) “The Exchange” is the information passed between two stations in a contest. Football copied it for reference to the ball being hiked from the center to the quarterback or when the quarterback hands it to a running back.

That’s it. I rest my case. And I didn’t even get around to mentioning “The Net”, “Amped Up”, or “Short-circuited”.

I hope to see you all at the next meeting but if not, then the month after... at Joe’s Place.

MP-Joe

QSO Today Virtual Ham Expo 2021 Update

The March 13-14 2021 QSO Today Virtual Ham Expo is in full planning mode with many exciting new things underway for the upcoming event. In addition to the world-class line-up of 60+ speakers and workshops (for a complete list and early bird registration go to www.qsotodayhamexpo.com), the Expo team is proud to announce an entire speaker track dedicated to the amazing world of AMSAT - the worldwide group of amateur radio operators who share an active interest in building, launching and then communicating with each other through non-commercial amateur radio satellites. To date, over 70 amateur radio satellites have been launched. At the Expo, there will be 9 sessions by AMSAT experts who will discuss everything you need to know about taking advantage of this satellite network. These include:

- Introduction to Amateur Radio Satellites (Douglas Quagliana, KA2UPW)
- Getting On the Air with Satellites (Bradford Clint, K6LCS)
- How to Enjoy Amateur Radio Contacts With the International Space Station (Frank Bauer, KA3HDO)
- Implementation of LDPC Encoder on FPGA (Anshul Makkar)
- Debris Mitigation in Earth's Orbit (Anshul Makkar)
- Digital Multiplexing Transponder from the Open Research Institute (Michelle Thompson, W5NYV)
- Solving the ITAR and EAR Problem for the Amateur Radio Satellite Service (Michelle Thompson, W5NYV)
- Remote Labs for P4XT Engineering Development (Paul Williamson, KB5MU)

In addition to the speaker track, AMSAT will have a booth at the Expo where attendees can talk to experts, enthusiasts, operators and technicians about this very cool technology. Booth visitors can also get contact and membership information for the thirty member AMSAT societies around the world.

Michelle Thompson, W5NYV, an AMSAT Director, said that “operating within the Amateur Radio Satellite Service is one of the most rewarding privileges of holding an amateur radio license. There has never been a better time to be involved in amateur radio satellites since some long-standing regulatory burdens have been lifted and advanced technology has never been more affordable and accessible. We have opportunities now that were not available as of even a few years ago. AMSAT is fortunate to contribute to the Expo by showcasing the truly amazing work going on around the world in the amateur satellite scene. And the Expo is an ideal partner to show it off to the wider ham audience.”

Said Eric Guth, 4Z1UG, QSO Today host, “AMSAT is making a major contribution to the upcoming Expo by helping our attendees to learn about this exciting technology, new developments, and how they can apply it to their everyday activities. These presentations will range from beginner to expert - so there will be something for everyone interested in space communications at the Expo.”

Anyone can attend the QSO Today Virtual Ham Radio Expo from their home or office. Early Bird Tickets are just \$10 (to help cover the cost of this event, \$12.50 at the "door") and include entry for the Live 2 day period as well as the 30-day on-demand period). Registration can be found at www.qsotodayhamexpo.com.

For more information, go to www.qsotodayhamexpo.com

FARC BOARD OF DIRECTORS

FARC Officers and Board members:

Stuart Home, WB6VRJ President	wb6vrj@w6to.com (559) 485-8659	12/2021
Ken Holden, WA6OIB VP	wa6oib@w6to.com (559) 323-6753	12/2022
Mike Chico KM6MRT Treas.	km6mrt@w6to.com (559) 277-8918	12/2022
Jim Erbe, W6NIF Sec.	w6nif@w6to.com (559) 222-7524	12/2022
Larry Lion, W6OWL	larrylion2@outlook.com (559) 227-5159	12/2022
Dennis Holloway, KI6NVG	dki6nvg@hotmail.com (559) 323-7386	12/2021
Rob Egan, KM6SRR	egan@netpic.net (559) 868-2888	12/2021

Web master Aaron Lusk, K6USY k6usy@w6to.com (559) 301-1022

Skip Editor John Morrice, K6MI k6mi@pacbell.net (559) 275-7373



You can download this and past Skip issues under the Document Archive menu by visiting w6to.com.

On the even years four directors are elected, and on odd years three directors are elected.

For sale adds on the next to last page of Skip!

Take advantage of the opportunity, send your adds to K6MI at pacbell.net

Event-Date

Feb. 12 Fri. FARC meeting 7 P.M.

March 12 Fri. FARC meeting 7 P.M.

April 9 Fri. FARC meeting 7 P.M.

April 18 National Radio Operators Day

San Joaquin Valley Nets:

The Noontime net meets on 7.268.5 MHz. This net handles a lot of messages.

The California Traffic Net meets daily on 3.906 MHz and 6:00 PM local time.

The Golden Bear Amateur Radio Net meets nightly at 7:00 PM local time on 3.975 MHz.

Northern California Net (NCN), the Section Traffic Net, meets nightly on 3.533 MHz at 7 PM Pacific Time.

San Joaquin Net meets Monday-Saturday on 3918 khz, at 6 PM Pacific Time.

Western Public Service System (WPSS) meets nightly on 3952khz, roll—at 7:30 PM local Pacific Time.

The Mission Trail Net meets nightly on 3.8567.5 MHz at 8:00 PM local time.

Northern California Net 2 (NCN2) The slow speed training session of NCN, meets nightly on 3.533 MHz at 9 PM Pacific Time. Handling traffic on CW is a good way to improve your CW skills.

**Sunday and Wed. Night 2m Bozo Net, 8 P.M.
144.24 Mc. USB**

Monday 220 Mc. 8 P.M. USB 222.1 Mc

Tuesday 8 P.M. USB 1296.1 Mc.

Thursday 8 P.M. 432.1 SSB net

Wednesday 7 P.M. 10M cw net, 28.140

**Wednesday 8 P.M. 10M ssb
net 28.445**



Fresno Amateur Radio Club

Local Amateur Radio Repeaters

<u>Organization</u>	<u>Call Sign</u>	<u>Frequency</u>	<u>Offset</u>	<u>PL</u>
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	KJ6OUG	147.150	+	141.3
KE6JZ	KE6JZ	146.820	-	141.3
TURLOCK ARC	W6BXN	147.030	+	100.0
Fresno Low	K6WGJ	145.43	+	141.3
Meadow	N6VRC	147.165	+	141.3
Meadow	N6VRC	440.025	+	141.3
Santa Rita	N6VRC	147.285	+	141.3
Santa Rita	N6VRC	442.275	+	141.3
Visalia	N6VRC	442.525	+	141.3
Porterville	N6VRC	443.825	+	141.3
Fresno Low	K6WGJ	444.975	+	141.3
Bear Mt.	N6VRC	443.950	+	141.3
Mt. Bullion	N6VRC	442.350	+	141.3
Bear	N6VRC	927.05	+	141.3
Meadow Lakes	WA6OIB	146.61	-	141.3
WA6IPZ	WA6IPZ	52.84	-	82.5

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.

Birthdays

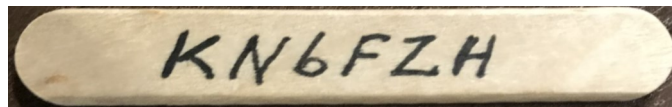
02/05 Jeff WA6IMA
02/20 Jim W6NIF
2/27 N6FUB Richard

Anniversaries

02/02 Julie & Joe WA6FFJ
02/26 Nora WA6BDE & Jim W6NIF

The monthly attendance prize! Suspended until we meet again.

The attendance prize in March. was won by Elijah, who was not present. Must be present to win. Next drawing will be \$20, when meetings resume.



THE DX CORNER

By Charles McConnell W6DPD

February 2021

Many DXpeditions are being postponed or rescheduled due to Covid-19 travel restrictions.

"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 currently not meeting due to Covid restrictions

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 **rolled back the rates** to those of 2011. The rate is \$2 for up to 10 cards, \$3 for 11 to 20 cards in one envelope, and \$0.75 per ounce for 21 or more cards. There is no longer a transaction fee. These changes began May 15, 2019.

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.

Scientists writing in NATURE magazine are predicting a Grand Solar Minimum beginning in 2020 are lasting for 3 solar cycles. Hopefully, they are wrong. NOAA Scientists predict the Cycle 25 peak will occur in July 2025 plus or minus 8 months.

Fresno Amateur Radio Club



Charles, W6DPD



Continued from the last page

The following operations are scheduled:

Sudan **ST2NH** is learning FT8 and is active

Ethiopia **ET3AA** Now

Uganda **5X1JT** now until 2022

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

Antarctica **VK0HZ** Davis Station for 1 year

Antarctica **ZL5A** Scott Base for 1 year

Antarctica **8J1RL** January 2021 to February 2022

Iraq **YI9WS** now to February 21, 2021

Togo **5VDE** February 11 to February 20, 2021

Antarctica **RI0ANT** Now through May 30, 2021

South Sudan **Z81C** now for at least a year

Chad **TT8SN** December 1, 2019 for 3 to 4 years

Ascension Island **ZD8HZ** Mid January to December 2021

Vietnam **3W9OK** March to April 2-21

Svalbard **JW/LB2PG** now through June 2021

Seychelles **S79VU** September 30 to June 30, 2021

Guantanamo Bay **KG4MA** June 2020 to March 2021

St. Pierre and Miquelon **FP/KV1J** postponed to June-July 2021

St. Pierre and Miquelon **T05T** Postponed to August 8 to August 16, 2021

Swains Island **W8S** postponed to spring 2021 due to travel restrictions

Sable Island **CY0C** October 14 to October 28, 2021

Somalia **60100** November 20, 2020 for 2 months

Botswana **A25VR** April 28 to May 24, 2021

St. Kitts and Nevis **V47JA** June 12 to July 10, 2021

St. Eustatius **PJ5/W5JON** June 22 to June 28, 2021

Balearic Islands **EA6/DF8DX** October 7 to October 13, 2021

Chesterfield Islands **TK/C** Postponed until 2021

Galapagos Islands **HC8** planned for 2021

New Zealand Sub Antarctic Islands **ZL9** 2021-2022

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.

ARRL on the Purpose of Amateur Radio

For over 100 years amateur radio and ARRL — the National Association for Amateur Radio® — have stood for the development of the science and art of communications, public service, and the enhancement of international goodwill. Amateur Radio's long history and service to the public has solidified the well-earned reputation that "Amateur Radio saves lives."

Amateur Radio Operators, due to their history of public service, their training, and the requirement that they be licensed by the FCC have earned their status as a component of critical communications infrastructure and as a reliable resource "when all else fails."

Amateur Radio is about development of communications and responsible public service. Its misuse is inconsistent with its history of service and its statutory charter. ARRL does not support its misuse for purposes inconsistent with these values and purposes.



116TH CONGRESS
2D SESSION

H. RES. 1201

Expressing support for the designation of April 18, 2021, as “National Amateur Radio Operators Day”.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 23, 2020

Mrs. LESKO submitted the following resolution; which was referred to the Committee on Oversight and Reform

RESOLUTION

Expressing support for the designation of April 18, 2021, as “National Amateur Radio Operators Day”.

Whereas amateur radio, or “ham radio”, is an important hobby that brings people together, regardless of profession, sex, or race;

Whereas amateur radio is the oldest form of digital communications;

Whereas amateur radio has played an invaluable role in developing new forms of electronic communications;

Whereas amateur radio offers individuals a chance to learn new technological skills;

Whereas groups such as Youngsters On the Air (YOTA) are working to ensure that there is a next generation of amateur radio operators;

Fresno Amateur Radio Club

2

Whereas amateur radio groups and amateur radio clubs across the Nation provide communities an important way to communicate with one another;

Whereas the amateur radio operator's code contains as a major principle ideals that are important to country and community;

Whereas a key purpose of amateur radio is to have a group of skilled volunteers to assist emergency responders in an event of a disaster;

Whereas members of the amateur radio community, such as the Amateur Radio Emergency Service (ARES) have provided invaluable emergency communications services following recent natural disasters, including but not limited to helping coordinate disaster relief efforts following Hurricanes Katrina, Wilma, and Maria and other extreme weather disasters;

Whereas, on April 18, 1925, the first International Amateur Radio Union was formed in Paris; and

Whereas April 18, 2021, would be an appropriate day for the celebration of "National Amateur Radio Operators Day":
Now, therefore, be it

1 *Resolved*, That the House of Representatives—

2 (1) supports the designation of "National Ama-
3 teur Radio Operators Day" and its celebration
4 around the United States; and

5 (2) recognizes that continuing importance of
6 amateur radio operators and their role in bringing
7 communities together in times of need.

○

•HRES 1201 IH



The QCWA meets on the fourth Monday on 146.85 repeater at 7:15 P.M.

Ham Radio Mantra

We're all mostly stuck at home.

Let's do some radio therapy and have fun on the air!

Everyone works everyone and with stay-at-home there should be beaucoup activity.

Forty-eight plus days of fun.

Rules:

1. Stay away from people.
2. Wash hands frequently
3. Don't touch face.
4. Turn off TV news.
5. Take care of each other.

"This is Ham Radio" Film (vintage 1970 with excerpts from 1969).

Re-mastered by ARRL and officially posted onto YouTube in on 10/24/11:

<http://www.youtube.com/watch?v=nuIExTh4CF8>

Operate Exuberantly!

We are amateur radio operators! We have been the masters of "virtual" technology for over a hundred years and have been leaders all that time in bringing the kind of instant, distance connectivity to the world that makes it possible in this moment for so much in our civilization to carry on, even when we are personally separated.

Fresno Amateur Radio Club

Anything to sell? Send info to
k6mi@pacbell.net for next month's
Skip

Your add or card here!
Talk to the treasurer about the yearly fee!

10-15 meter
M2 10-15M1DX rotatable dipole an-
tenna
Never used. Still brand new.
\$100
ki6qel@sbcglobal.net



TELEWAVE, INC.

Wireless Communications Manufacturer since 1972

Designs & Manufactures
 High-Quality Radio System Products for the
AMATEUR RADIO INDUSTRY

Transmitter Combiners • Antennas • Filters • Wattmeters • RF Power Monitors
 Cello • High-Q Cavities • Preamplifiers • IM Suppression • Receiver Multicouplers • Preselectors
 Duplexers • RF Loads & Terminations • Isolators • Wireless System Engineering

➤ Order Today! 800-331-3396 ◀

660 Giguere Court, San Jose, CA 95133
 Email: sales@telewave.com • <http://www.telewave.com>

CMAS Contract # 3-06-58-0122B
GSA Contract # GS-35F-0248J



ANTENNA SYSTEMS, INC.

Michael Staal
V.P. & Designer
K6MYC

- Antenna Design & Production from
DC to Microwave
- Machine Work & Manufacturing Services
- System setup & Installations

4402 N. Selland Ave. Fresno, CA 93722
 559.432.8873 Fax 559.432.3059 website: www.m2inc.com

For Sale:

From the N6IG estate, 40 meter (with wire
sides for 30, 20, 15, & 10M) DX Engineering
30' tilt over vertical with radials. \$50. New-
500\$

Contact John, K6MI for details 559-275-7373,
or email at k6mi@pacbell.net

For Sale

1. Yaesu G5500 az/el rotator w/50 ft. control
cables - \$650
2. K3NG Arduino rotator controller/interface
for above - \$75

TNX/73, Richard N6FUB (559) 285-9772

For Sale

Henry 2k linier amp, beautiful condition
Bill, AA6S in Visalia. aa6s@comcast.net

1. Modulation Analyzer - HP8901B
150KHz to 1.3 GHz (have manual)
 2. RF Sweep Generator also have uWave
plug in (no manual)
 3. Scalar Network Analyzer with probes
(no manual)
 4. Also have some old lab power supplies
contact me for more info.
- Hickok uVolt signal generator-
Some bands outputs look good, the high-
er frequency bands come and go depend-
ing on the dial setting...

I may just need a little TLC or tweaking. I
also have the original printed manual with
schematic.

Trade for 2meter/220 MHz or HF trans-
ceiver or offer.

Best regards, Lou WB6YFW



Fresno Amateur Radio Club

Only if you are a new member! All current 2020 members are good for 2021!

Fresno Amateur Radio Club (FARC) New Membership Application

Name _____ Call _____ \$20 Dues ___ Date _____

Street Address City State Zip _____

Home Phone (____) _____ Cell Phone (____) _____

Email ADR _____ (for delivery of Skip Newsletter)

License Class _____ Year 1st Licensed _____

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

ARRL Member? _____

Additional Family Member(s) in same household (\$5 each)

Spouse Name _____ Call _____

Son/Daughter Name _____

FRESNO AMATEUR RADIO CLUB, INC.
P.O. Box 5912
Fresno, CA 93755-5912

