



Dues! The Fresno ARC encourages all old and new members to fill out the form on the last page of any Skip and send with checks to the club P.O. Box. Remember to make checks out to "Fresno Amateur Radio Club, INC."

Our next club meeting

Friday August 11 7 P.M.

Derrel's Mini Storage Office 3239 W. Ashlan Ave Fresno, CA 93720

FARC Next Event-Meeting Aug. 11 Fri. at 7 P.M.

FARC BOARD meets the 1st Tuesday of the month, next meeting Sept. 5

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

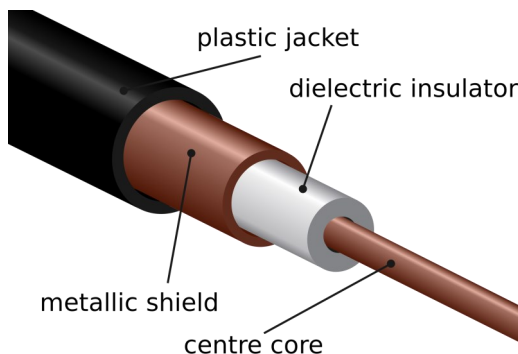
Web page:

W6to.com

No meeting in September— instead our yearly picnic at Ken and Gwynne Holden's place on Sat. Sept. 9, 4 P.M. Swimming and a pot luck, followed by Bingo! Address in QRZ.com

August meeting— tech talk on coax fittings. Every ham station needs some coax with fittings.

Find out how to do your own.



Remember to check into our FARC nets when you can, on the W6TO repeater (146.94-). Drive time net Monday through Friday at oh dark thirty, and the Sunday night net at 7 P.M.

The FARC board has made plans for the rest of the year, including the Swap Meet in November, the Christmas Banquet in December, the forming of a nominations committee in August– with the recommendations presented in September along with nominations from the floor. In the odd years we elect three, and the even years we elect four. There are a total of seven on the board. The board elects the officers. Since there are four officers out of seven board members, anyone elected needs to be prepared to serve.



The root beer float committee was a great hit at the July meeting, along with stories of the radios brought in. Mike, K6MYC, had the oldest radio, a 1922 crystal receiver. Jim W6NIF, Gwynne WA6VZM, and Mary KN6PRZ are shown with the makings.



FARC– New Members! 2023 dues now due! Stay on the membership list!
Send your dues check to Fresno Amateur Radio Club, INC., PO Box 5912, Fresno 93755-5912
Board meeting on the first Tuesday of the month. Details from Stu, WB6VRJ

Fresno Amateur Radio Club Barbecue & Swim Party

When: Saturday September 9th, 2023. Festivities start @ 4:00PM With munchies----meal to commence @ 5:00PM.

Where: Holden Rancherita---2549 E. Copper Ave., Clovis.

(Between Willow & Chestnut, North on Willow or Maple and turn West from Willow or East from Maple on Copper ½ mile to 2549 or call...289-2891 for directions)

Activities: Swimming, Ping Pong, Fellowshiping & Outside Bingo with Fabulous prizes!!

Menu: BB-Q Tri-tip, Appetizers, Ice Tea, Lemonade & Water to be provided. Side dishes, salads, desserts (homemade ice cream –YUM!) to be provided by members “Pot Luck” style. Sign-up on webpage: www.luckypotluck.com/potluck/W6TO1
Or call Gwynne @ 994-7658 for guidance.

SEE Y'ALL THERE!!!!

FARC BOARD OF DIRECTORS

FARC Officers and Board members:

Ken Holden, WA6OIB Pres.	wa6oib@w6to.com	(559) 289-2891	12/2024
Aaron Lusk K6USY V.P.	k6usy@w6to.com	(559) 905-4180	12/2023
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Larry Lion, W6OWL	larrylion2@outlook.com	(559) 227-5159	12/2024
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Skip Editor John Morrice, K6MI k6mi@pacbell.net (559) 275-7373 (550) 906-7031 cell



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

FARC meeting Aug.11 7 P.M. Friday

No Meeting Sept. 8 Picnic instead! **Sat. Sept. 9, 4 P.M. at WA6OIB**

VHF contest Sept. 9-10

Meeting Oct. 13 Friday 7 P.M.

Swap meet Sat. Nov. 11 8-noon

San Joaquin Valley Nets:

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 3.857.5 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 Night FARC 2m net 7 P.M. 146.94 Mc.
Sunday and Wed. Night 2m Bozo Net, 7:30 P.M. 144.24 Mc. USB
Monday 220 Mc. 7:30 P.M. USB 222.1 Mc followed by check ins on 50.140 Mc. USB
Tuesday 7:30 P.M. USB 1296.1 Mc.
Thursday 7:30 P.M. 432.1 SSB net

Wednesday 7 P.M. 10M cw net, 28.140
Wednesday 8 P.M. 10M ssb net 28.445

Every Wednesday night is an enjoyable time for all ham operators. At 7PM local time, there is a CW net on 28.140 MHz-the NCS is Guss, KF6ZXO- welcomes all hams regardless of CW speed. Then around 8 PM local, there is the USB net on 28.445 MHz.

The *Noontime Net* is a public service Amateur Radio Net that meets everyday on 7284 kHz. and 3970 kHz. with an alternate frequency of 7265 kHz for both nets.

QCWA net on 146.85 pl 141.3 7 P.M. on the Monday before the fourth Tuesday of the month.

Backup FARC repeater if 146.94 is down—
146.61 pl 141.3

Fresno Amateur Radio Club

Found
while
cleaning
out a
desk
drawer.

Duane
KI6QEL



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	146.865	-	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 backup	WA6OIB	146.61	-	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
WA6IPZ	WA6IPZ	52.84	-	82.5
Tulare CARC	WA6BAI	146.88	-	103.5

Birthdays

8/01 Dave KA6VTA
8/06 Ken WA6OIB
8/18 Dennis KI6NVG
8/19 Mike KK6DCQ
8/24 John KF6KCZ
8/28 Ben WB6GBS

Anniversaries

8/04 Brenda & Sean KN6UAD
8/22 Mary KN6PRZ & John K6MI
8/25 Jamie N6PSB & Larry WA6ZBL
8/26 Norma & Ted W6TLM

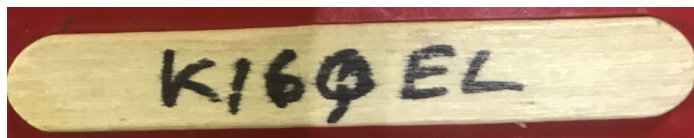
Ten meter net, CW and Phone, every Wednesday
 7 P.M. for CW at 28.140
 8 P.M. for SSB at 28.445

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 winner for July was not present! Duane, KI6QEL missed out!

Next drawing will be \$20 at the Aug. meeting. If winner is not present it will go up \$10 a month until someone wins and is there to claim it.

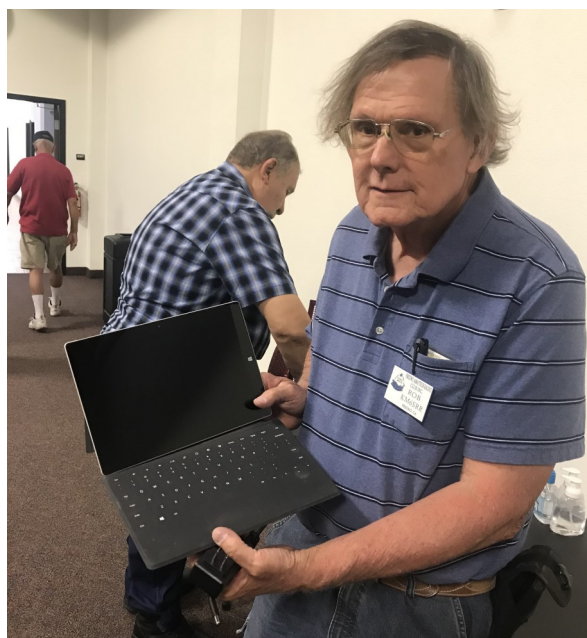


QCWA Quarter Century Wireless Association

Jeb's Blueberry Hill Café
3851 N. Blackstone Fresno, CA 93726

QCWA Net on Monday before the fourth Tuesday of the month at 7 P.M. on 146.85 pl 141.3.

The net will continue during the summer, with the next meeting on September 26.



Rob was the top prize winner of the raffle, a lap top computer. Many great stories about first radios, along with a talk by Joe, W0PJD, about his visit to ARRL.



Is FT8 better than CW?

The choice between FT8 (a digital mode for amateur radio communication) and CW (Morse code) depends on your specific needs and preferences. Here are some reasons why you might consider choosing FT8 over CW:

1. **Ease of Use:** FT8 is a digital mode that uses software to encode and decode signals, making it easier to operate for those who are not proficient in Morse code. It requires less training and practice compared to learning CW.
2. **Efficiency:** FT8 is designed for weak signal conditions and can often establish reliable communication even when signals are barely perceptible. It uses advanced error correction techniques to ensure accurate message transmission, making it a robust choice for long-distance communication.
3. **Automation:** FT8 operates in an automated fashion, with the software handling most of the signal processing and decoding. This means you can leave your radio unattended while the software handles the transmission and reception, allowing you to engage in other activities simultaneously.
4. **Worldwide Popularity:** FT8 has gained significant popularity among amateur radio operators worldwide. It has become a standard mode for many DXpeditions (amateur radio expeditions to rare locations), contests, and special events. Its widespread use increases the chances of finding other operators to communicate with.
5. **Bandwidth Efficiency:** FT8 utilizes a narrow bandwidth, allowing for more simultaneous communication within the available frequency spectrum. This efficiency is particularly advantageous during periods of increased radio traffic.

That being said, CW also has its merits and advantages over FT8:

1. **Legacy and Tradition:** CW has a long-standing history in amateur radio, and many operators value the tradition and skill associated with Morse code. Learning CW can be a rewarding experience and connect you with the roots of amateur radio.
2. **Minimal Equipment Requirements:** CW can be transmitted and received using relatively simple equipment, such as basic keying devices and inexpensive radios. This simplicity makes it suitable for portable or low-power operations.
3. **Narrow Bandwidth:** Although FT8 is efficient in terms of simultaneous communication, CW has an even narrower bandwidth requirement. This makes it ideal for situations where available frequency spectrum is limited or crowded.
4. **Longevity:** Morse code has proven its resilience over time and has been used in various contexts, including emergency communications. It remains a reliable mode when other digital modes or voice communication are not feasible.

Ultimately, the choice between FT8 and CW depends on your operating preferences, skill level, equipment availability, and the specific conditions under which you plan to communicate. Some operators enjoy the challenge and artistry of CW, while others appreciate the convenience and effectiveness of FT8. It's always beneficial to have a range of skills and modes at your disposal to adapt to different situations in amateur radio.

The 3rd W9IMS radio event will be Aug 7 to Aug 13. This is the last of 3 events for their certificate. Look at QRZ and select W9IMS for details and frequencies.
Jim, W6NIF



My wife Barbara and I were in Boston in June of this year for a wedding, We went to W1AW on Friday, June 27. Newington is about an hour away from Boston where we were staying with some old friends, Paula and PAM. (That is his nickname for Petraeus Alexander Michaelis) so you see why we call him PAM.

I have been seeing pictures of the place since was 9 years old so it was thrilling to actually see the ARRL headquarters.

There is a 3 story administration building with 2 antenna towers. That building was built in 1963 and has a lot of commemorative signs and brick and benches of people who have donated to the league. The antennas I guess are for a station that is for staff only in that building. They had a display area, not really a museum. It was featuring Heathkit stuff, and I saw some rigs I recognized like the DX 100 and the Apache. They had all the publications there also and a reception area.

About 75 yards away, in front of the administration building and across a large parking lot was the iconic W1AW brick building, apparently never seen by Mr. Maxim, the original W1AW. He was instrumental in purchasing the 20 acre area where it now stands and in designing the building, but he died in 1936 before it was finished.

It has three antenna towers all covered with beams, verticals and attachments for wire antennas. None are very high and one has a 40 meter three element beam only about 25 feet up. There is a lot of lightning protection on the towers and antennas and lightening arrestors on all the antennas. They have Heliac transmission lines on all the antennas. The furthest is about a 150 foot run.

Apparently they say they get along with the hams in the neighborhood, but I doubt that since they are pumping 2000 watts through the air on 5 HF, VHF and UHF simultaneously, 20 feet up when they are broadcasting their bulletins and code practice.

The building itself is two story. The top is storage. There are three rooms for visitors to operate. And 6 positions. There are dedicated FT8, satellite other digital positions. The rigs are all latest so pretty complex to operate. I did some FT8, but didn't want to learn another transceiver layout just to operate.

Fresno Amateur Radio Club

The main floor also has the automatic transmitters for W1AW code practice and bulletins transmitted each day of the week. The HF bands are all max power, but we heard that 100 watts is often enough so they shut off the amplifiers some of the time and that saves lots of power.

There was also a big TV display of the earth with all the ham satellites on it, the sun numbers, the path of the sun, and all the current ducting for 10 meters, 6 meters, 2 meters and 220. It had the orbit of the SST also on it. All live.

That was pretty amazing since it was pretty much a summary of ALL amateur activity on the planet. was a workshop for the station manager which was a real mess, but looked great.

They were updating the air conditioning system. The couple we were staying with in Boston whose daughter was getting married and why we were in Boston, the husband is an aeronautical engineer with a PHD from MIT and they discussed the air conditioning system for over an hour and he had some suggestions that they seemed to take into account. The entire W1AW building is pretty messy. They do have Maxim's original rotary spark transmitter called 'Old Betsy', but it is not well displayed and there were piles of electronics on the floor, primarily because they were gutting the walls for the air conditioning system instillation.

There were NO visitors that day and we had two volunteers and three staff members to ourselves for the entire three or so hours we were there. They all loved to talk about anything and especially their stations. What a job to have!

The station manager, Joe Garcia NJ1Q showed us the place and spent the most time with us. I was interested in the League's efforts with young people and so they called the education and learning manager, Steve Goodman, K5ATA. He had just finished a "teacher institute" where 15 Jr. Hi and High School teacher, free of charge (including air fare, food and lodging) get a week in Newington learning about ham radio, teaching it and lots of the fun aspects like fox hunting, balloon launching, etc. and get a handful of gear to take back home to teach the kids. They all get licenses if they are not already licensed. He has 12 of these programs each year and they are all sponsored by money from donations. The league general budget doesn't contribute to the teacher institutes at all! There are lots of other thing going on aimed at youngsters to keep this from becoming an "old man's hobby".



There was a great Italian restaurant about a block away and we had lunch together before we went back to Boston. All in all, a great day.

> Joe W0PJD

Tube of the Month

810

In the mid-1940s, RCA started advertising again the tubes they developed before the War. Many of the tube types were widely used by the military, but with the end of the War, RCA needed to expand their commercial customer base. Commercial AM radio had been shut down during the War and was ready for enormous growth. In the late 1940s, the people had an AM radio in the kitchen and one in the car. The major manufacturers of AM broadcast transmitters seem to like to use similar tubes. The major players in this market, were RCA, Gates and Collins. Local radio stations were licensed for power levels commonly in the 250-to-1000-watt range. There were also stations down to 50 watts especially at night. The running of lower power at night was a very common requirement.

The tube that seemed to be very popular was the RCA [810](#) that was first announced in 1938. This 150-watt triode was recommended by RCA to be used as a modulator as well as an RF amplifier. The tube was good to 30 MHz plus and used up to 2250 volts at 275 ma on the plate. The filament was 10 volts at 4.5 amps. It would have been very popular among the hams, but they were buying 250TH and 304TL tubes for small change on the surplus market. RCA liked the 810 and modified it with a different grid and created the [8000](#) which had a mu of 16.5 instead of 36. They also made a version of the 810 with a 5-volt filament called the [1627](#). Taylor Tubes also made an [810](#), but it had slightly different characteristics.

RCA, Gates and Collins all used the 810 in their 250-watt transmitters.



1627



RCA BTA-250L (bunkerofdoom.com)



Collins 300G (collinsradio.com)



810

The Gates BC-250T transmitter was the most popular set in this class. At 750 pounds this is a lot of weight for 250 watts out. The key was that the 250-, 500- and 1000-watt amplifiers were basically the same. You could buy a 250 and later buy a kit to make it into a 1000. It may have been easier to buy the BC-1T and get a kit to change the tubes and run 250 watts as all the sets used the same parts except for the power supply and some tank capacitors. The BC-1T used [833A](#) tubes and the 10-volt filament transformers could be used with the smaller 810 tubes. The 250-watt stations were so conservative and reliable that some were still in use 40 plus years after they were installed. Today several of these transmitters have been bought by hams and operated on 160-meter AM.



Gates BC-250T (Gates service manual)



Gates BC-1T (AL0E)

Fresno Amateur Radio Club



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Looking for input, stories or pictures or just
a sentence about your ham activities this
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Thanks, John K6MI



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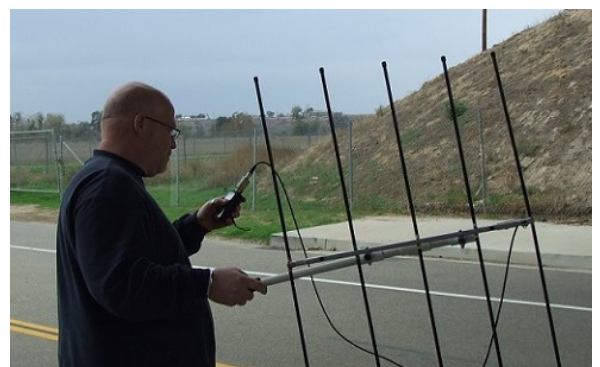
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Fresno Amateur Radio Club

Dues due in January!

Fresno Amateur Radio Club — 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 _____ ARRL member _____

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

Spouse's name _____

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

Name _____ Call _____ Birthday _____

Make checks out to: Fresno Amateur Radio Club, Inc. (Do not abbreviate)

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

