



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

June 9 Friday 7 P.M.

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

FARC Next Event-Meeting May 12 Fri. at 7 P.M.

FARC BOARD meets 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

Rob KM6SRR will be our MC at the June meeting, which will include short presentations on how to give contacts at the vhf contest on Sat. at 7 P.M. June 10 on 146.52 FM SX, and at 7 P.M. Sat. June 24 for FD, also starting on 146.52 SX FM.

ARES/RACES will have info on their FD camp out, for those that want to go out in the field.

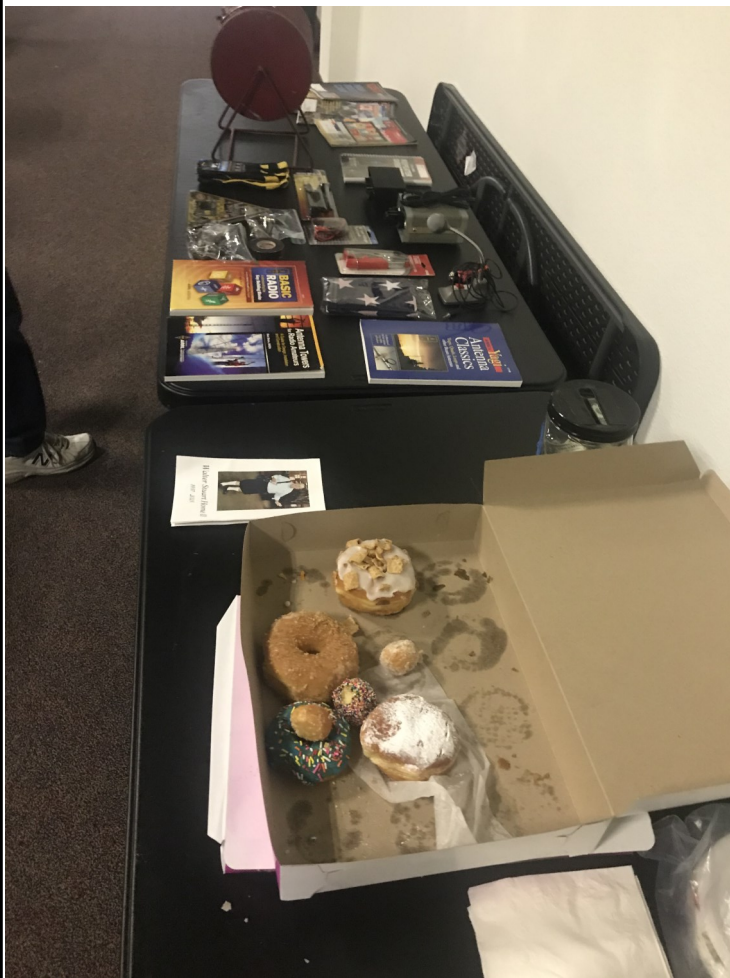
Think ahead— our July meeting is a return of everyone bring something old (radios-not people), share a story, and enjoy root beer floats.

And maybe there will be a Dayton report!





Speaker for the May FARC meeting was Aaron K6USY, who demonstrated his remote IC-9700, with the lap top screen projected behind him.



Using his lap top he remoted to his station and can work 2m, 432 and 1.2g. John K6MI also had his lap top remoted to his station, and the two were able to have a qso from the two remoted stations. The donuts were flying out of the box, pictured here near the prize table, which was full of great prizes.

President Ken WA6OIB kept the meeting flowing along.

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

FARC BOARD OF DIRECTORS

FARC Officers and Board members:

Ken Holden, WA6OIB Pres.	wa6oib@w6to.com (559) 289-2891	12/2024
Marcus Beedle KG6QNY Treas.	kg6qny@w6to.com (559) 360-7444	12/2024
Jim Erbe, W6NIF Sec.	w6nif@w6to.com (559) 222-7524	12/2024
Larry Lion, W6OWL	larrylion2@outlook.com (559) 227-5159	12/2024
Dennis Holloway, KI6NVG	dki6nvg@hotmail.com (559) 323-7386	12/2023
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Web master Aaron Lusk, K6USY k6usy@w6to.com (559) 905-4180

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

FARC meeting June 9, 7 P.M. Friday
VHF Contest June 10-11 Sat.-Sun.
FD June 24-25 Sat.-Sun.
FARC meeting July 14 7 P.M. Friday

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**

Field Day June 23-24 2023

Club hang, or FD meet and greet, or club FD event, call it what you will—here are the details:

On Sat. June 23 at 7 P.M. everyone is invited to come on the air, starting on 146.52 Mc. FM simplex, and exchange FD contacts with all who come by.

Call a station and give them this exchange:
“your call” “class” (see chart below) “section” (SJV, San Joaquin Valley)
They will then give you their information.

Write it down with the time for the log, which can be sent in for our club score.

This is like a net, but with no net control. Call someone when you can, and then let them call someone.

Message to SM. Is 100 extra points.

All the extra points are listed at www.arrl.org/field-day-rules

The June FARC meeting is the place for discussion on the goals of the club, and the finalization leading up to the event.

Class-

- 1a Club group temporary set up
- 1b one or two person temporary set up
- 1c mobile
- 1d home station
- 1e home station, emergency power
- 1f emergency EOC



Another special event for hams to start collecting is the W9IMS certificate.

First event was May 7 thru May 13 on various ham bands, either on SSB or FT8. This first event was the Grand Prix on the

14th.

So go to QRZ and look up that call and read all about this nice event that I have been collecting certificates from.

Just something to do as a new or old ham operator. I usually hear the station calling on 14.245 or thereabouts.

The 2nd event was the Indy 500 for the week of May 22-28th and the 3rd is Aug 7 -13, NASCAR Brickyard race.

Jim, W6NIF

Fresno Amateur Radio Club

Local Amateur Radio Repeaters

Organization	Call Sign	Frequency	Offset	PL
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

06/03 Stanton AA6I
 6/08 Gary KM6CVB
 6/09 Mikeal KM6MRT
 6/11 Jack WY6B
 6/12 Sean KN6UAD
 6/13 Hal KN6WEH
 6/23 Jo WA6FFJ

Anniversaries

6/04 Greg KM6GSO
 6/07 Sharon and Barry K9AMO
 6/18 Judy & Ben WB6GBS

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

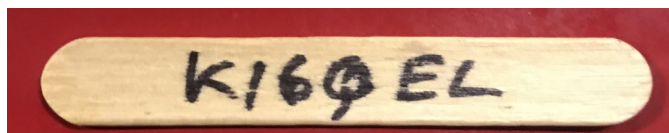
8 P.M. for SSB at 28.445

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 May was not present at the drawing of \$20. Duane did not collect!

Next drawing will be \$30 at the June meeting. If winner is not present it will go up \$10 a month until someone wins and is there to claim it.



Fresno Amateur Radio Club



QCWA Quarter Century Wireless Association Lunch

Jeb's Blueberry Hill Café
3851 N. Blackstone Fresno, CA 93726
Noon Tuesday May 23, 2023

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.

June 10-11 VHF-UHF contest on all simplex frequencies above 50 Mc.

Starts at 11 A.M. Saturday and goes all the way to 8 P.M. on Sunday.

Use GMT time if you are sending in your log to the ARRL.

All modes are good. There are different categories for low and high power, or portable or analog only. Rover categories as well, work everyone again after moving to a new grid.

Contest Objective: For amateurs in the US and Canada (and their possessions) to work as many amateur stations in as many different 2 degrees x 1 degree Maidenhead grid squares as possible using authorized frequencies above 50 MHz. Stations outside the US & Canada (and their possessions) may only work stations in the US (and its possessions) and Canada.

Dates: The second full weekend in June. **(June 10-12, 2023)**

Contest Period: Begins 1800 UTC Saturday, ends 0259 UTC Monday.

Contest Rules are now maintained as a single downloadable document.

[**Complete ARRL June VHF Contest Rules \(PDF\)**](#) at arrl.org

The exchange is your grid square!

Fresno Amateur Radio Club



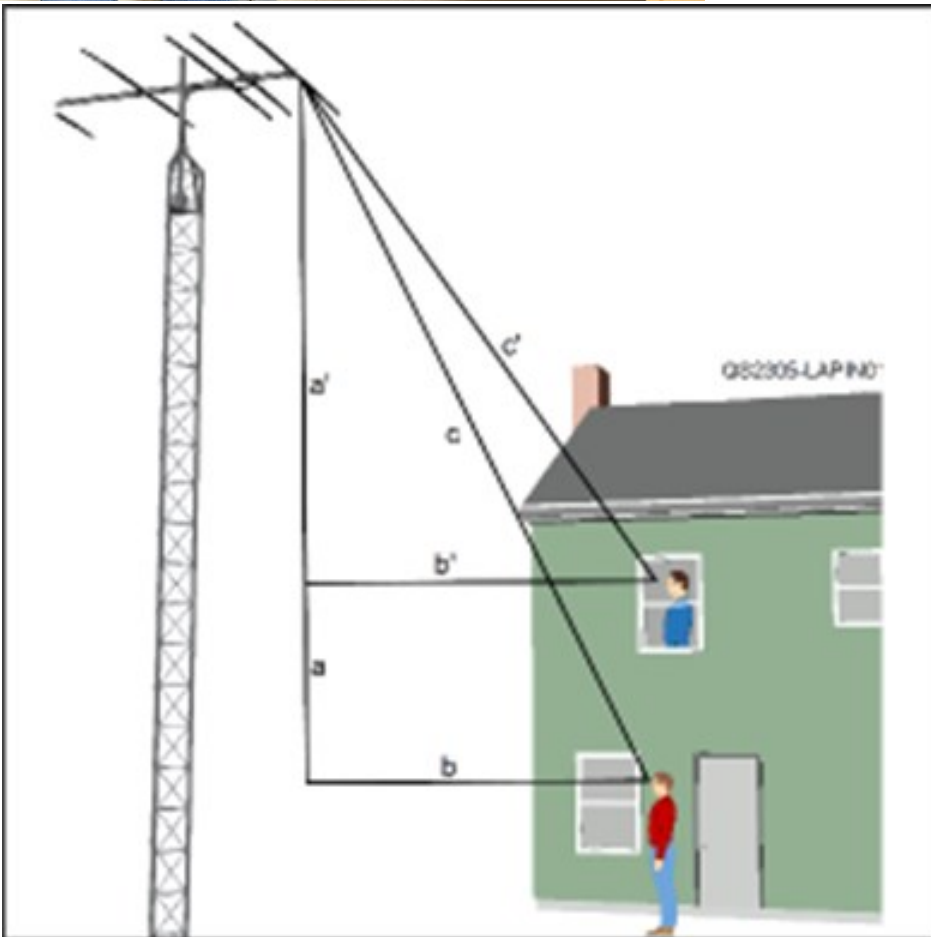
Ken WA6OIB and Larry W6OWL, at the FARC repeater site.

The repeater has worked flawlessly for decades, but recently went off the air and then came back on, with Ken unable to find anything, as every time he went up there it was back on.

If that happens at net time then use 146.61 repeater as a back up.

Check out the club repeater on 222 FM and 444 as well. Repeaters for this area are on page five of this Skip.

Thought for the day:
Two antennas meet on a roof, fall in love and get married. The ceremony wasn't much, but the reception was excellent.



FCC Exposure Rules Soon to Affect Every US Radio Amateur

Gregory Lapin, PhD, PE, N9GL

Beginning May 3, all ham radio transmitters operating in the US will be expected to comply with new FCC rules governing RF exposure limits. These new rules, which went into effect in May 2021, raised many questions in the ham radio community. Gregory Lapin's, N9GL, article, "FCC Exposure Rules Soon to Affect Every US Radio Amateur," is a plain-language explanation of the FCC's expectations including information about how to perform the necessary assessments of your station.

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Fresno Amateur Radio Club



The winter storms were numerous and had great power. Pat W6YEP got a surprise after checking the winter damage at the Fish Camp cabin.

XYL Jean is shown next to the 30 foot tower that holds a small beam. The guy wires kept it up, but the ice bent the bottom section away from the building.



The beam is still working, and a DX contact on 20m with France was enjoyed this month.



Got my 2m HO Loop up this morning before it got hot. Ken did a great job tuning it, it barely moves the SWR meter. Tested it out with Rob on 144.240 and got a great signal report. I can also hear the Tehachapi beacon now.

Next project, 70cm HO Loop

The hidden transmitter hunt on May 27, Sat. started at Letterman Park at 10 A.M. The winning team took 20 minutes to find the transmitter, shown here in the tree (LiPo 24 amp battery and radio in the box with a wire J pole antenna hanging in the tree). Ken WA6OIB and grandson Eli KN6FZH came in shortly after. Two hours later John K6MI came, just beating the last team.



The transmitter was expertly hid by Rob, AE6GE who placed the trans-



mitter in a commercial back alley adjacent to a park.



Walter Stuart Home II

1937 - 2023

Stu's service in May was attended by many FARC members. The service was at St. Teresa's, with gravesite at Belmont Memorial and a reception after.

There was string music before the service and a bagpipe for the recessional. Taps closed out the gravesite service, and Pardini's catered the reception after.

Stu was a long serving board member, president for 12 years, and active in the club since the 60's.

Unterseebootsenderöhre, RS 291

In the years before WWII, the Telefunken Company developed special tubes for specific applications. The German surface fleet was neutralized early in the war so the Unterseeboote (U-boats) were the primary focus. Telefunken made two types of short-wave transmitters for the U-boats. One was a standard unit for normal operations in the North Atlantic and a more powerful transmitter was made for very long-range operations. The most common unit was the 200-watt, S 406 S/36 developed in 1936. It used a pair of [RS 291](#) tetrodes in its final amplifier. The RS 291 is rated at 110 watts dissipation which seems to be overly modest when the tube is about 10.5 inches long. The anode was rated at 1500 volts at 160 ma. The filament was 8 volts at 1.6 amps. This tetrode was designed for efficient operation using grid modulation. The base has three banana plug sized sockets instead of pins.

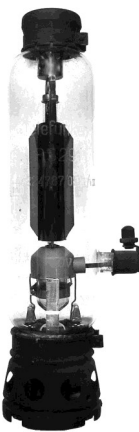
The U.S. relied mainly on quartz crystals for transmitter frequency control and produced about 30 million crystals. Germany had little access to quartz as it was mainly mined in Brazil so their consumption was less than 1 million. Telefunken knew they had to produce a stable VFO for frequency control especially in the U-boats, so an extensive research program was started to solve the issues. Thermal expansion of the metal in a VFO's enclosure was solved by die-casting a magnesium-aluminum ceramic which made the structure more rigid and the ceramic had a neutral response when heated or cooled. The enclosure was plated with copper to provide shielding. Most transmitting capacitors were made using mica but mica was another material in short supply in Germany. Ceramic was developed to make highly stable fixed value capacitors. For the proposed VFO's inductance, a variometer was made of high tolerance ceramic with electroplated traces of copper and silver. The ceramic capacitors were made in stacks of several small value capacitors that had different thermal responses and thus canceled out any thermal drift. With this transmitter they were able to stably transmit on 1,125 different 10 kHz split channels covering 3500 to 15000 KHz.

At the beginning of WWII, the U-boats were extremely successful. There was little defense against them. Their greatest enemy was a micromanaging command structure. They demanded that the boats make radio schedules to get instructions. With the VFO controlled radio, they could be anywhere in the spectrum and even if the Allies heard a message, they couldn't accurately get a bearing. All transmissions were CW and encoded using an Enigma machine. Eventually the Allies developed a technology they called "Huff Duff" or HF Direction Finding utilizing a "birdcage" antenna that wasn't affected by masts or other objects. A quarter of the U-boats that were sunk were the result of radio intercepts. Microwave RADAR and SONAR helped deal with the rest. The crew of a standard U-boat was 44 including 2 "funkers" or radio operators all sharing 1 bathroom and no shower.

The photos of the U-boat radio room, the RS 291s and the S 406 S/36 transmitter are shown with permission from cdvandt.org.

Visit the museum at N6JV.com

Norm N6JV (chief funkner)



Fresno Amateur Radio Club

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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!

Looking for input, stories or pictures or just
a sentence about your ham activities this
month for the next. Skip.

Thanks, John K6MI

My name is Hal. I signed up for member-
ship at the swap meet. Since, I have gotten
my general license. I am shopping for my
first HF mobile transceiver. If you might
know of anyone that might have something
for sale I would appreciate a heads up.
Thank you KN6WEH Hal 559-930-0944

I have a free 6-foot, 19-inch equipment rack avail-
able to anyone that may want it. No rear door,
average condition. Pick up in Kingsburg, 559-341-
1978.

Larry, AD6W

For Sale
Yaesu Digital Voice Recorder
Fits FT-900, FT-1000 and FT-1000D
Have RTS program disk for Yaesu, Belfang, and some
other radios. If you need programming call me.

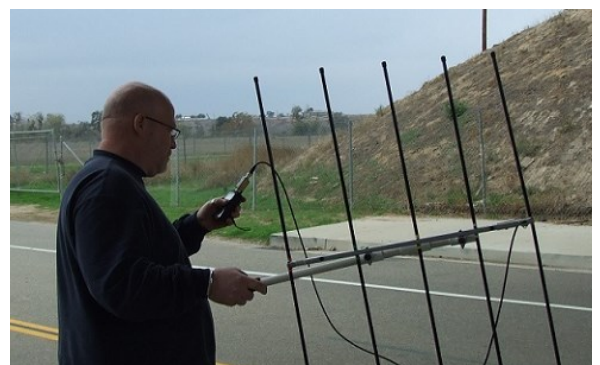
Want Bendix King programming cable for EPH HT.
Dennis KI6NVG 559 323-7386

On the lookout for a good starter hf mobile radio w/
ssb.

Joe KN6QLE 493-1552

Need Yagi antennas for 10 and 20M, or multi band
Yagi.

Dan Zurcher 559 392-3305



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

