A Fresno Amateur Radio Club Newsletter Feb., 2026 Volume 81, Issue 2

Membership Drive!!!!!!!!!!!! Keep your dues active, and your data up to date.

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.. 2026 dues can be paid now. Membership form on the last page of Skip.

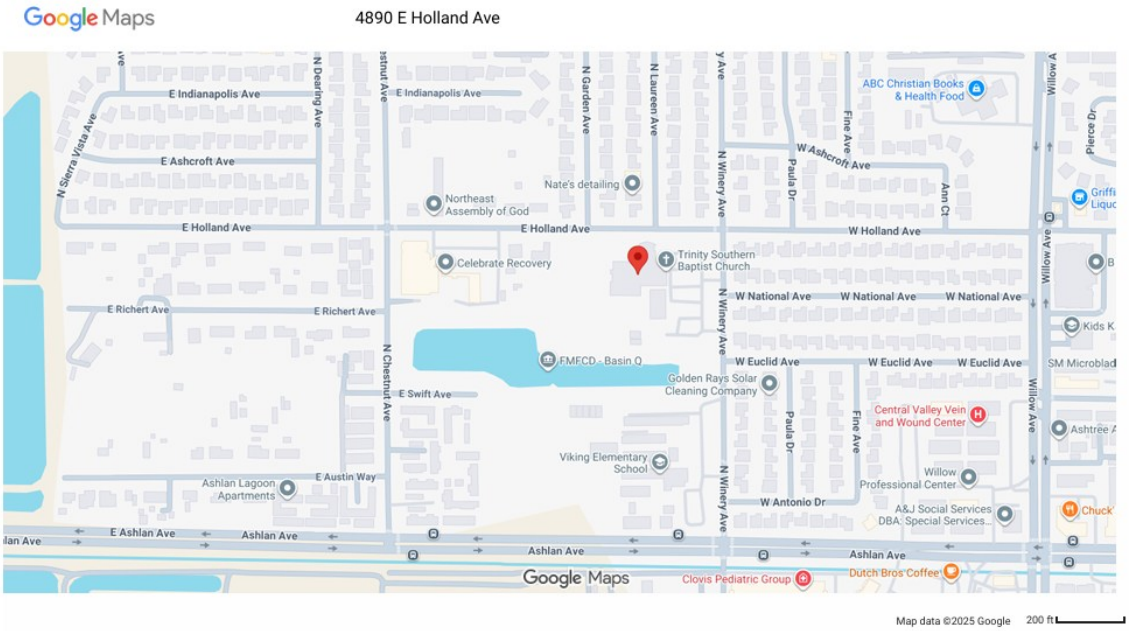
New meeting place! 4890 East Holland Ave near Ashlan and Winery

Attendees enter the parking lot from Holland Ave and enter the building by the dot on the map.

Valentine's Day Meeting! Everyone invited and will get their just desserts.

Sweet. Bring a story of your first introduction to Ham Radio.

Desserts welcome!



Remember the new meeting place!

FARC
Next formal meeting will be Feb. 13

FARC BOARD meetings by arrangement. Talk to a board member!

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
Morning Net 7:30 A.M.

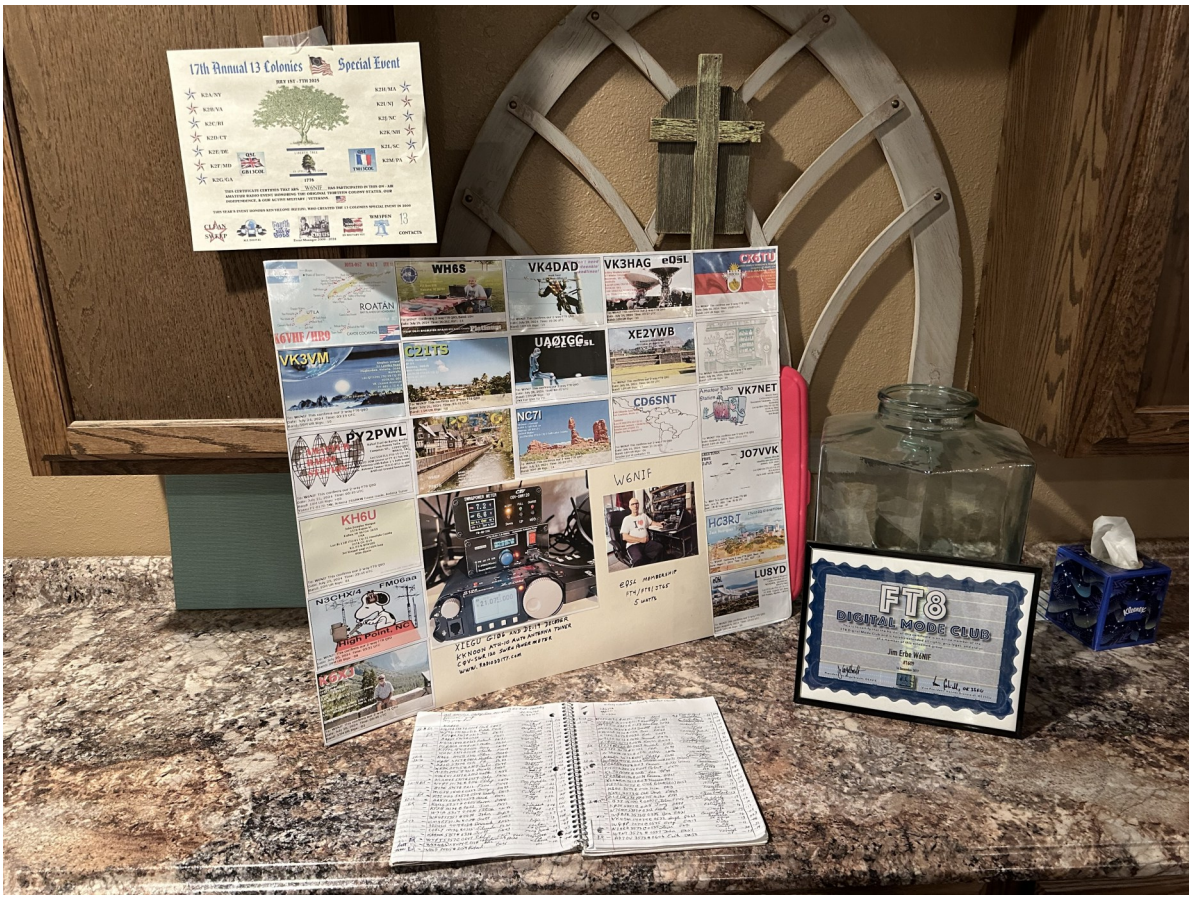
Web page:
W6to.com

Mailing ADR
PO Box 5912
Fresno, CA
93755-5912

President Ken WA6OIB happily at the mike welcoming us to the new meeting place. Thanks to Rob KM6SRR for arranging with Ben WB6GBS for working out the new location.

Aaron K6US presented us with a fine program about using the digital modes, concentrating on FT-8. This mode has allowed many low power and small antenna stations to work the world.

Jim W6NIF also had a presentation of his FT-8 log and QSL cards of the many stations he has worked



BOB SIMPLETON'S GUIDE TO QUARTER WAVE ANTENNAS

brought to you by *Amateur Radio Trader*

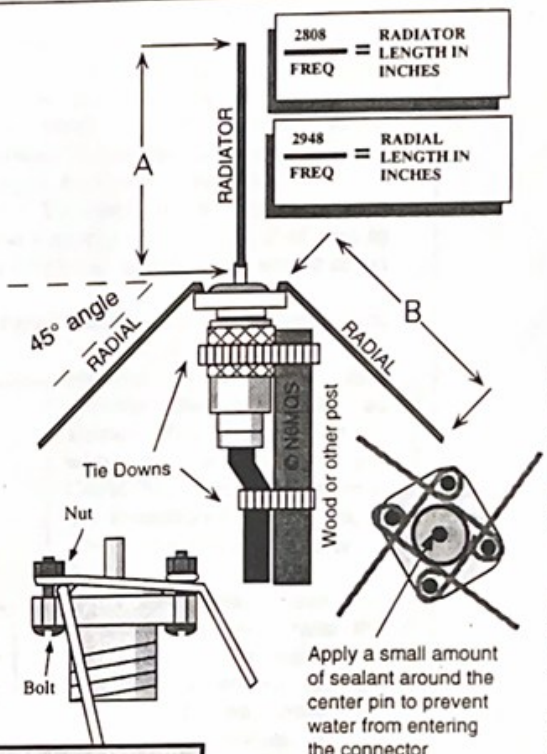
One of the simplest antennas you can build is a quarterwave ground plane antenna. It is small in size and is inexpensive.

The only part you will need to buy is a SO-239 panel mount connector. You can use an old wire hanger for the radiator and radials.

You will need to use your soldering iron or gun to attach the radiator to the center post of the SO-239. File any paint or coating from the radiator wire before soldering. Cut the radiator to the proper length before soldering it. If you can find a short copper tube to help secure the radiator to the SO-239, your antenna will stand up to high winds.

The radials may be soldered or attached with screws. Screws are the easier method if you take the time to overlap them as shown in the diagram. Cutting the radials may be done after the construction is complete.

The radials should be bent to an angle of 45 degrees for 52 ohm base impedance. If the radials are perpendicular to the radiator, the base impedance is approx. 36 ohms. Radials parallel to the radiator have an impedance of approx 75 ohms.



FREQUENCY CUTTING CHART

RADIATOR FREQ	RADIALS	
28.1	99.93	104.93
28.2	99.57	104.55
28.3	99.22	104.18
28.4	98.87	103.82
28.5	98.53	103.45
28.6	98.18	103.09
28.7	97.84	102.73
28.8	97.50	102.38
28.9	97.16	102.02
29.0	96.83	101.67
29.1	96.49	101.32
29.2	96.16	100.97
29.3	95.84	100.63
29.4	95.51	100.29
29.5	95.19	99.95
29.6	94.86	99.61
29.7	94.55	99.27
29.8	94.23	98.94
29.9	93.91	98.61
50.0	56.16	58.97
50.5	55.60	58.38
51.0	55.06	57.81
51.5	54.52	57.25
52.0	54.00	56.70
52.5	53.49	56.16
53.0	52.98	55.63
53.5	52.49	55.11
54.0	52.00	54.60

RADIATOR FREQ	RADIALS	
144.0	19.50	20.48
144.5	19.43	20.40
145.0	19.37	20.33
145.5	19.30	20.26
146.0	19.23	20.19
146.5	19.17	20.13
147.0	19.10	20.06
147.5	19.04	19.99
148.0	18.97	19.92
220.0	12.76	13.40
220.5	12.73	13.37
221.0	12.71	13.34
221.5	12.68	13.31
222.0	12.65	13.28
222.5	12.62	13.25
223.0	12.59	13.22
223.5	12.56	13.19
224.0	12.54	13.16

RADIATOR FREQ	RADIALS	
423.0	6.64	6.97
424.0	6.62	6.95
425.0	6.61	6.94
426.0	6.59	6.92
427.0	6.58	6.90
428.0	6.56	6.89
429.0	6.55	6.87
430.0	6.53	6.86
431.0	6.52	6.84
432.0	6.50	6.83
433.0	6.48	6.81
434.0	6.47	6.79
435.0	6.46	6.78
436.0	6.44	6.76
437.0	6.43	6.75
438.0	6.41	6.73
439.0	6.40	6.72
440.0	6.38	6.70
441.0	6.37	6.69
442.0	6.35	6.67
443.0	6.34	6.66
444.0	6.32	6.64
445.0	6.31	6.63
446.0	6.30	6.61
447.0	6.28	6.60
448.0	6.27	6.58
449.0	6.25	6.57
450.0	6.24	6.55

About Rubber Ducks

The rubber duck antenna on your handheld is not a very efficient antenna. The typical 2 meter rubber duck has a 5 dbs loss. If you have a 3 watt radio, your rubber duck will only radiate less than 1 watt!! A quarterwave antenna has 0 db loss and will allow all 3 watts to be radiated!!

Did you know...

Why we use 52 ohm coax ?

During world war II it was discovered that the minimum amount of material was needed to make a 52 ohm cable. It conserved critical war materials and increased profits for the manufactures!

Thanks to W3JIW for the info!

Why a tri-band Yagi is a good antenna!

It's useful to explain - scientifically and practically - why an antenna system like a **tri-band Yagi** increases both operating effectiveness *and* operator satisfaction, especially for those who don't regularly spend time on the higher HF bands.

At the core is **signal-to-noise ratio (SNR)**. A Yagi doesn't just add forward gain; it improves *usable* SNR by concentrating transmitted energy in one direction and rejecting noise and interference from others. On receive, this directional selectivity reduces atmospheric noise, man-made noise, and competing signals arriving from off-path azimuths. The result is cleaner copy, fewer repeats, and less cognitive fatigue. From a human-factors standpoint, that matters: operators stay engaged longer when effort reliably produces results.

From the **West Coast to the East Coast**, winter HF propagation is dominated by **mid-latitude F-layer paths**. On 20 meters, daytime ionization typically supports one- to two-hop propagation across the continental U.S. When solar flux is favorable, 15 meters can open as well, especially during late morning through mid-afternoon local time.

These paths are not omnidirectional; they exist in **defined azimuthal corridors** shaped by ionospheric density gradients, Earth's magnetic field, and solar illumination. A tri-band Yagi allows us to inject RF directly into those corridors rather than dispersing energy across multiple lobes.

This becomes increasingly important as **Solar Cycle 25 transitions away from its peak**. As the cycle declines, average ionization levels gradually decrease, but variability increases. Openings become shorter in duration and more selective in direction. In practical terms, the ionosphere offers fewer "wide doors" and more "narrow windows."

Directional gain compensates for reduced margin by increasing effective radiated power (ERP) along the usable path, often turning marginal conditions into workable ones.

Antenna **height** is the second half of the equation. Height directly controls the **vertical radiation pattern** of a Yagi, which determines **takeoff angle -** the angle at which RF energy leaves the antenna relative to the horizon. For long-haul paths like California to New York, lower takeoff angles are essential. Signals launched too steeply return to Earth too soon, producing short skip.

At heights in the **35–50 foot range** on 20 and 15 meters, a tri-band Yagi develops a primary lobe at low angles (roughly 10–15 degrees), ideal for multi-thousand-mile F-layer hops.

Why does that matter scientifically? Lower takeoff angles intersect the F-layer farther from the transmitter, reducing the number of hops required and minimizing cumulative absorption losses. Fewer hops mean stronger return signals, better phase stability, and improved copy at the far end. From California to the East Coast, this geometry aligns well with mid-latitude ionospheric structure, particularly during winter when D-layer absorption is lower but daylight ionization is more limited.

Taken together, these factors explain why a tri-band Yagi isn't just "more antenna." It's an **energy-management system**: shaping where power goes, when it goes there, and how efficiently it returns. For operators, that translates into clearer cause-and-effect - rotate the beam, watch signals rise, work stations with less effort. That immediate feedback loop builds intuition about propagation far faster than theory alone.

A tri-band Yagi, properly placed and understood, helps make the physics visible—and that's where both performance and satisfaction come from.

73, Scot Morrison, KA3DRR

Aaron K6US, our FARC VP, is looking for good subjects for our meetings. Talk to him and give him your input!

Aaron has been active working WAS (Worked All States) with his new call sign.

Month	Topic	Summary
January 9th	FT8 & FT4 (K6US)	Tips for successfully operating FT8/FT4 on HF with a live demo
February 13th	YL Night (WA6OIB)	Bring your YLs for some Valentine's Day treats
March 13th	APRS (K6US)	Automatic Packet Reporting System
April 10th	SDR Receivers (WA6OIB)	Physical and remote web based software defined radio receivers

Ham Exams in Fresno

Amateur Radio VE Exam - Fresno - 2/14/2026
Amateur Radio VE Exam - Fresno - 5/16/2026
Amateur Radio VE Exam - Fresno - 8/8/2026

Amateur Radio VE Exam - Fresno - 11/14/2026

The location is Hind's Living Well, same place as previous years. If you have any questions please email Rob AE6GE.

Marcus, KG6QNY, our clubhouse mastermind has a variety of radios on display, both working and ready to be deployed.

He is up for members visiting.

We will have more pictures in succeeding issues!

QCWA Quarter Century Wireless Association

Next meeting February 24, Tuesday at noon!

At Huckleberry's, Bullard and Hwy 41, back room- join us for lunch!

QCWA meetings on Monday nights at 7 P.M. on the QCWA repeater, 146.85, pl 141.3

Quarter Century Wireless Association is a national organization, and has dues for the national group. The local group invites everyone to come to the meetings on the air and in person.

Hams can count their number of years from the year first licensed, even if they had some lapsed years.

73, John K6MI president. Jerry K6PKO vice president, Jim W6NIF secretary

Larry WA6ZBL was the first ticket drawn at the raffle.

FARC BOARD OF DIRECTORS

FARC Officers and Board members:			
Ken Holden, WA6OIB Pres.	wa6oib@w6to.com	(559) 289-2891	12/2026
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Rob Egan, KM6SRR	km6srr@w6to.com	(559) 281-4730	12/2027
Guy Lee, KN6WET	kn6wet@w6to.com	(559) 353-0063	12/2027
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Duane KI6QEL FARC Net Manager

Skip Editor John Morrice, K6MIk6mi@pacbell.net (559) 275-7373 (559) 906-7031 cell

You can download this and past Skip issues under the Document Archive menu by visiting **w6to.com**. FARC ADR P.O. Box 5912, Fresno CA 93755-5912

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 to send your ads to K6MI at pacbell.net

2026 Friday meetings 7 P.M. New location!

Feb. 13 Friday meeting 7 P.M.

March 13 Friday meeting 7 P.M.

April 10 Friday meeting 7 P.M.

San Joaquin Valley Nets:

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.

Jefferson Noon Net 7.204 Mc. Mon. to Fri. 11:30 A.M. to 12:30 P.M.

Just Another Net 7.204 Mc. Sat. and Sun.11:30 A.M. to 12:30 P.M.

Sunday Night FARC 2m net 7 P.M. 146.94 Mc.

QCWA Monday at 7 P.M. on 146.85 pl 141.3 net

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 founder is Guss, KF6ZXO, and John K6KEP currently 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*.

Backup FARC repeater if 146.94 is down—
146.61 pl 141.3

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	K6ELK/R	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
Madera (Deadwood)	W6BW	146.745	-	123

Birthdays

2/01 David KD6WBA
2/05 Jeff WA6IMA
2/8 Candy KO6GVW
2/11 Gary KN6TZD
2/17 Mary KN6PRZ
2/19 Ron KE6JSX
2/20 Jim W6NIF
2/22 Sara KE6NKK
2/22 Daniel KO6GWG
2/23 Thomas W6KMB
2/27 Richard W6FUB

Anniversaries

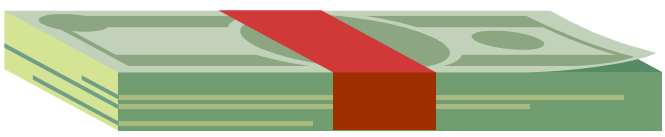
2/23 Cathy & Daniel KO6GWG

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 NEXT drawing for $30 will be at the Feb. meeting. Must be present to win.

K6UKZ, who often contributes to the raffle prizes was not present.



For Sale
Hygain 4 element 20m/17m LJ-294ba $100
Also want Yaesu microphone YE-17
Dennis KI6NVG 559 323-7386
dholloway225057@gmail.com

Swap meet in November and May

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

For sale:
MFJ-986 Differential-T tuner
3kw Roller Inductor Tuner
$100 OBO
Richard N6FUB (559) 285-9772

This OM remembers the great sunspot peak of '57

Dennis KI6NVG asks if there is anyone in Fresno area that can repair an HF radio or a uhf/vhf radio?
In many ways older radios are no longer supported by the major brands as parts are not available and the cost is more than buying a new radio.
Dennis is looking for parts for Yaesu FT-690 m11, a soft carry case CSC 19 and a battery case for C cells FBA-8.
Also wants a 6M 10w amp like the FL-6020, a hand mic with scanning MH 10FB, and mobile mounting bracket MMB 31, as well as a telescopic BNC antenna Yha-14,
Dennis KI6NVG 559 3232-7386

FARC Web Page at:
W6to.com

Mail ADR:
PO Box 5912
Fresno, CA 93755-5912

Dues due in January! 2026 dues can be paid now! If you are a new ham the first FARC year is free!

Fresno Amateur Radio Club — Membership Application- Renewal

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)_____
Partner'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