



A Fresno Amateur Radio Club Newsletter May, 2024 Volume 87, Issue 5



**FARC Next Event—
Meeting May 10, Fri.
7 P.M.**

**Derrel's Mini Storage
Meeting Room
3239 E. Ashlan
just East of Valentine**

FARC BOARD meets
the last Thursday 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
Morning Net 7:30 A.M.

Web page:
W6to.com

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."

Info on page 2 for the next meeting-

FARC Swap Meet and Estate Sale Saturday May 25, 8 A.M.-1 P.M.

Sellers arrive and set up at 7 A.M.

Admission is FREE for everyone

Location of Swap Meet:

Lion Automotive
2944 Phillip Avenue
Clovis, CA 93612-4934

Directions: From Clovis Ave. turn East onto Gettysburg Ave. and travel for 2 blocks, turn South on Phillip Ave., proceed to Lion Automotive building and Parking Lot.

Walk through the open gate to the Swap Meet, which will be held in the fenced yard attached to the building.

Held in conjunction with the CARP club featuring a number of estates from silent keys (SK).



Picture from the 2023 FARC Swap

Remember to check into our FARC nets when you can, on the W6TO repeater (146.94-). Drive time net is Monday through Friday 7:30 A.M., and the Sunday night net at 7 P.M.

Regular meetings on the second Friday of the month.

Month Topic Summary
April Soldering methods and techniques
Presented by Ken WA6OIB

May Wire Antennas Learn how to deploy and tune Dipoles and End-Fed Half Wave wire antennas

June Field Day Prepare and organize for Field Day 2024 - June 22-23

July Old Radio Night - Ice Cream Bring your old radio gear to our annual show and telling.

August Logging - QRZ, eQSL, LOTW - Awards Come learn about setting up logging software, LOTW, and applying for awards.

September Picnic Date TBA
Oct. Business meeting
Nov. Swap Meet
Dec. Dinner



WB6HYD, Tom, drawing the first prize ticket.



FARC– New Members! 2024 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.

Fresno Amateur Radio Club

SIMPLEX EXERCISE

The Fresno Amateur Radio Club conducted a simplex exercise for the Sunday Night Net on April 28, 2024 at 19:00 local time. The exercise was announced on the 3 previous Sunday night nets in order for the members and guests to prepare their radios for simplex operation.

The repeater was turned off at about 18:00 local time and the net control operator (KI6QEL) conducted the net and called the roll on 146.940 MHz simplex at 19:00 local time.

There were 26 total check-ins with 20 of them on the simplex frequency (146.940) and 6 on the input to the repeater (146.34) as heard on a scanner monitored by the net control operator. 7 of the stations needed relays as the net control station either could not hear them or were too weak. The 146.610 MHz repeater was also monitored in case members were unaware of the exercise on simplex, as we use that repeater when 146.940 is down. Nothing was heard on the 146.61 repeater however.

Simplex exercises give amateur radio operators an opportunity to practice communicating without the use of a repeater. This exercise was designed to focus on basic skills with your radio, becoming familiar with programming your radio, opening up your squelch in order to hear weak stations, etc. Although these skills may be necessary for emergency communications, if all the repeaters went down, we were not focusing on emergency communications as we have other groups like ARES to facilitate emergency communications.

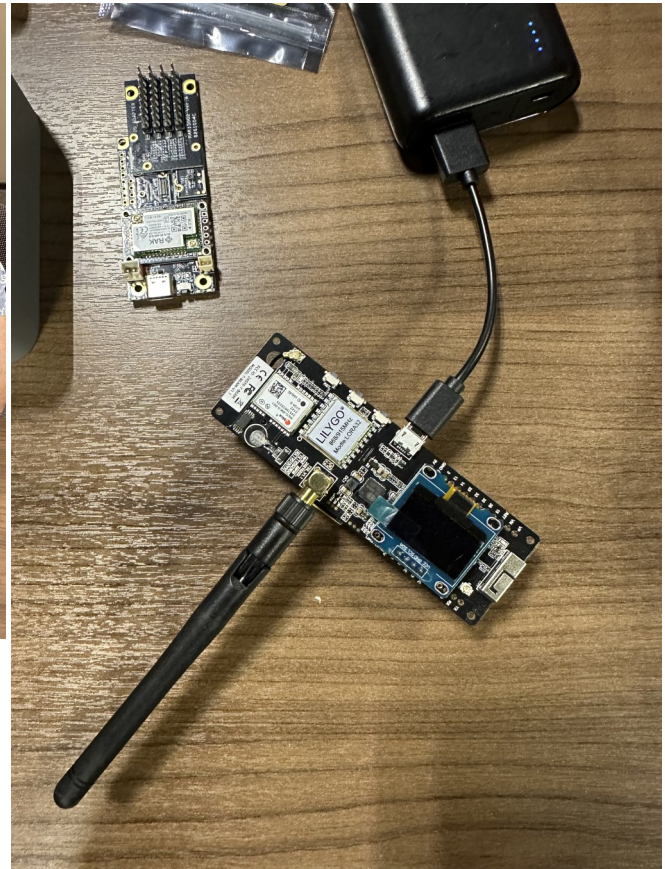
A big thank you goes out to the relay stations that helped with the exercise. Ken (WA6IOB), Aaron (K6USY), Jerry (W6KEG), Jim (W6NIF), and Terry (KK6ZKE) were the relay stations.

All things considered, the exercise was a success and in the future may be something that could be performed twice a year.



Fresno Amateur Radio Club

W6WD with his small 927 Mc. Project.



Soldering tools and techniques were the program for April, presented with an amazing display of different tools by Ken, WA6OIB.

Many tables full of items, it was an amazing display and tech talk, with people able to spend some time soldering and learning a few new tricks. Even those who were very experienced were able to learn a few new things!

Fresno Amateur Radio Club

FARC SUNDAY NET SCRIPT

QST, QST, QST, this is amateur radio station _____, my name is _____ and I'll be the net control station for the Fresno Amateur Radio Club SUNDAY NIGHT net.

The Fresno Amateur Radio Club is affiliated with the ARRL.

Before I continue, is there any emergency traffic?

This net is held on the W6TO repeaters every Sunday for Fresno Amateur Radio Club members and guests. It provides news and information as a supplement to our regular club meetings.

The frequency for this net is 146.94 Mhz with a negative offset and a PL of 141.3 Hz. If this repeater is down, we will use 146.61 Mhz with a negative offset and a PL of 141.3 Hz.

The Fresno Amateur Radio Club meets the second Friday of each month. You are invited to attend the meetings at the Derrel's Mini Storage Training Center at 3239 W. Ashlan Ave. in Fresno at 7:00 p.m.

If the meeting location and date are changed the information will be announced on this net and in SKIP. Remember to visit our web site at W6TO.com

This is a directed net please transmit only when requested by net control.
Are there any FARC member stations needing an early check-in, Mobile or Limited Power ?

President's report, WA6OIB, Ken
Vice-President's report K6USY, Aaron

Are there any other board member with reports or announcements?
Are their representatives of other area radio clubs who have announcements?

The official FARC member roll call is coming up. When called, please list any traffic or "for sale or want" items you have for the net.

Visitors will be invited to check in following the FARC member roll call. (Roll Call)

That's the roll call as I have it. Are there any late or missed FARC members?
Are there any visiting stations wishing to check into the FARC net?

As a service to Valley Amateurs, this net continues with the "for sale and want" section. Please limit your items to amateur radio related equipment.

(Pre-listings first) or (We have no pre-listings)

Are there any stations with something to list?

Hearing none, this concludes this session of the Fresno Amateur Radio Club net.
This net meets every Sunday at 19:00 local time.

Monitor the other FARC net on this repeater which is the Daily Morning Commute Net, with Ben WB6GBS, Monday thru Friday from 7:30 to 8:00 AM.

Remember to attend the regular FARC club meetings the second Friday of every month at the Derrel's mini storage on West Ashlan Ave.

This is net control station _____ thanking you for taking part in tonight's net. The repeater is once again available for regular amateur radio use.

Revised 02-05-24

Net manager Duane KI6QEL

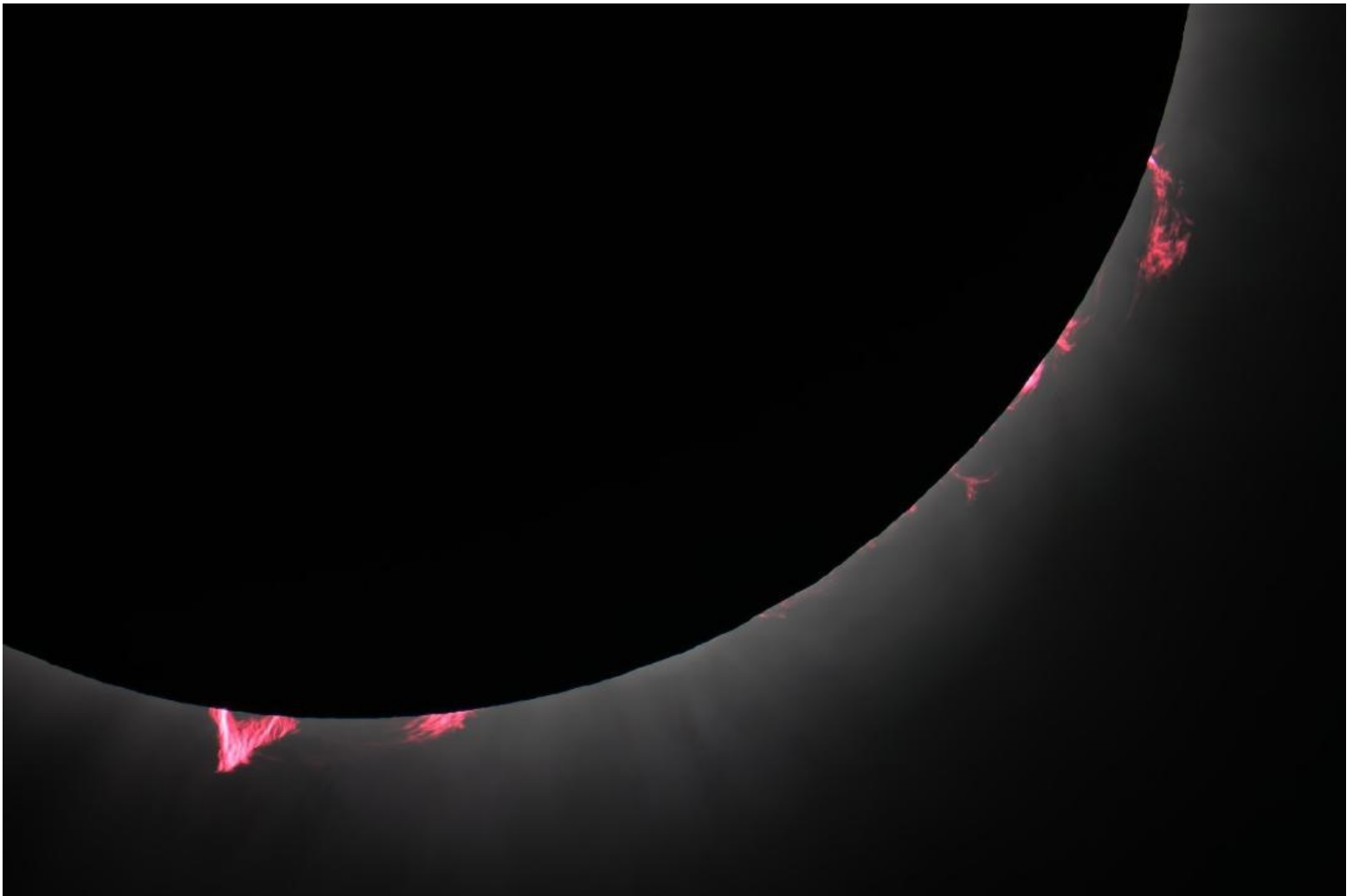
Fresno Amateur Radio Club

From Aaron, K6USY

Drove to the Dallas Texas area with the family for the total solar eclipse that took place on April 8th.

Due to clouds the event was not visible the whole time but fortunately the clouds opened up around totality in order to get some clear pictures. I was using my 5-inch telescope with a filter directly connected to my camera.

Additional pictures are on my website: <https://k6usy.com/2024/04/08/total-solar-eclipse/>



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	12/2025
Marcus Beedle KG6QNY Treas.	kg6qny@w6to.com	(559) 360-7444	12/2024
Jim Erbe, W6NIF Sec.	w6nif@w6to.com	(559) 903-2200	12/2024
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Duane KI6QEL FARC Net Manager
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 to send your ads to K6MI at pacbell.net

May 10 Meeting 7 P.M.

June 14 Meeting 7 P.M.

VHF Contest June 8-9

FD June 22-23 Sat.-Sunday

July 12 Meeting 7 P.M.

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 Monday. Meeting on the fourth Tuesday of the month.

Backup FARC repeater if 146.94 is down—

146.61 pl 141.3

Future ham exams are May 18, August 17. and Nov 16.

Exams are held at Hines Hospice on Shaw Ave

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

5/21 Angelo KO6AFO

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

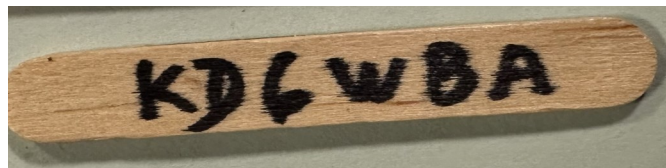
8 P.M. for SSB at 28.445

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 drawing for \$30 at the April meeting was won by kd6wba, who was not present.

Next month \$40.



Anniversaries

5/05 Mary & Dave KA6VTA

5/12 Craig W6CMR

5/27 Bonnie & Gary KM6CVB

Fresno Amateur Radio Club

QCWA Quarter Century Wireless Association

Next meeting May 29, 2024 at noon

at Jeb's Blueberry Hill Café
3951 N. Blackstone Ave., Fresno, CA 93726



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



From the April QCWA meeting, K6PKO Jerry and Pat W6YEP with a very old English made Chrystal radio set.

Lower left is Larry W6OWL's completed antenna project which was pictured in last month's Skip.



Fresno Amateur Radio Club

4CX300A

In the 1950's, EIMAC developed their first ceramic tube the [4CX1000A](#). Different construction techniques were tried which resulted in a very strong and reliable tube. With this success, the Air Force wanted them to develop a smaller ruggedized tetrode for use in the new high performance jet aircraft where it would be subjected to much higher vibration and g load. EIMAC downsized the 1000A into a 300-watt tube with a breechblock socket system. After testing over 100 experimental tubes, they tried to determine how close they were to the special contract specifications. Eventually the tube was perfected to pass testing, but there were several failures. At an electronics show in August, 1956, EIMAC presented a paper titled *A New 300 Watt Stacked Ceramic Tetrode of High Reliability* to introduce the new tube. From this paper we can learn of the problems they had and the solutions they found.

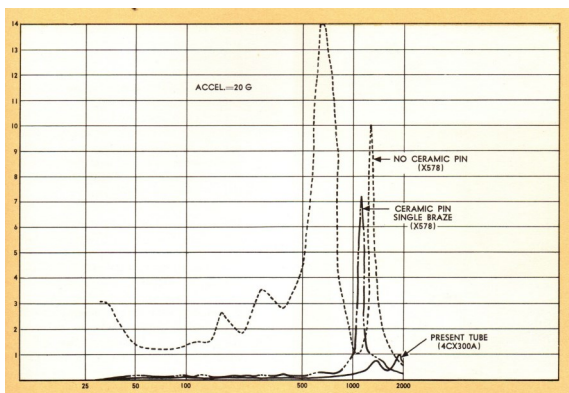
The design parameters for the 300A were very challenging.

1. Survive a 50g shock for 11 ms.
2. Survive vibration at 20g over 30 to 2000 cps at low noise.
3. Continuous operation at 250 degrees C.
4. Full rating to 500 MHz.
5. Simplified construction for "unskilled" labor.

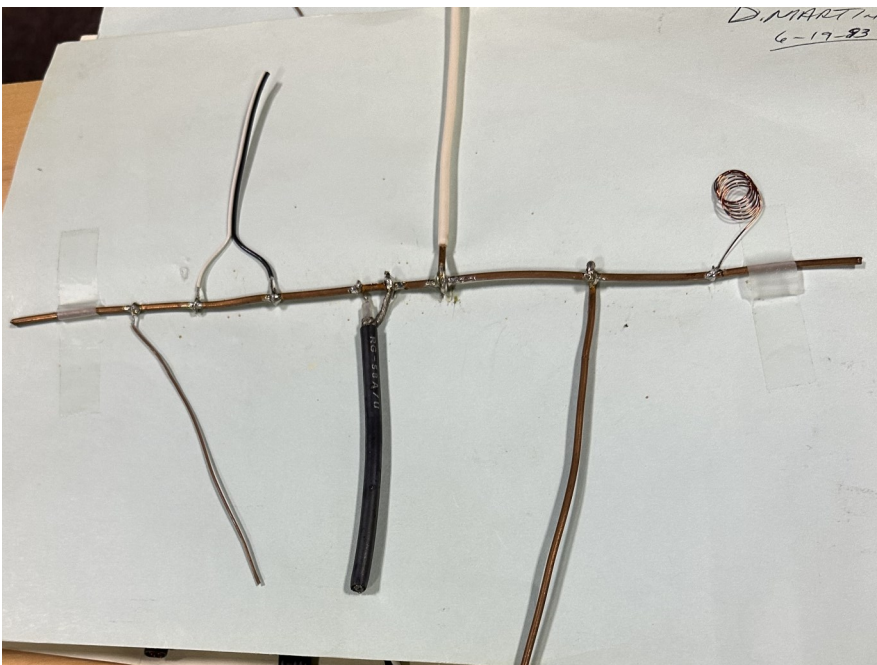
The new tube worked great at 500 MHz and could tolerate operation at 350 degrees C. The construction allowed the ceramic sections to fit like "Legos" so production was simplified. The problems started when the 50g shock caused the seals with the anode to fail. That shock is like being hit with a hammer and the tube would become bent in the middle. Making a stronger seal fixed this problem and it required no extra anode support. The vibration test was another issue. The tops of the screen and control grids weren't supported and rang like tuning forks at 700 and 1200 cps as shown in the graph that EIMAC supplied in their paper. A brazed ceramic pin was introduced to stabilize the grids and this was partially successful. Brazing both ends solved the problem and the result is seen as the small peak on the graph.

The new [4CX300A](#) or 8167, operated with up to 2500 volts at .25 amps for 300 watts dissipation. The heater ran on 6 volts at 3 amps. EIMAC made a similar tube, the [4CX300Y](#) or 8561, that was a 400-watt tube but had a lower frequency limit.

Norm N6JV [Tube museum](#)



Fresno Amateur Radio Club



David Walter - WA5GUL



BLACKCURRANT



RED CURRANT



DIRECT CURRANT



ALTERNATING CURRANT

DC AC questions continue on most ham exams. David has found a good way to figure it out.

Remember when we had to regularly test the tubes in our radios?

Below Mary, KN6PRZ is at the 10 meter radio working some new countries on FT-8, and even FT-4. Due to the good sun spot conditions there is a lot of activity, and many new hams are working the world on a regular basis.

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Fresno Amateur Radio Club

Future ham exams are May 18, August 17. and Nov 16..

Amateur Radio VE Exam - Fresno

Where: Hinds Hospice
2490 W Shaw Ave Fresno, CA 93711

Registration is recommended Payment In Full At Event Only Everyone US\$ 15.00 (pay at venue)
Exams offered for Technician, General, and Amateur Extra Class

What to Bring:

1. Photo Identification - State issued Drivers License or ID Card, Passport, or Military ID Card.
2. FCC Registration Number (FRN) - Required prior to exam, see details below.
3. (if upgrading) [Official Copy](#) of current Amateur License or Successful Completion of Examination (CSCE certificate)
4. Valid Email address
5. Fee \$15.00 per test session. Exact change please.

CORES FRN Requirement - Applicants must use an FCC Registration Number ([FRN](#)) for all license transactions with the FCC. Examinees must [register in CORES](#) and receive an FRN before exam day. Exam Candidates you are REQUIRED to register in the FCC CORES system and receive a FCC Registration Number (FRN) before exam day. Applications that do not have an FRN will be **rejected** by the FCC.

An [instructional video](#) provides step-by-step instructions on how to establish a CORES account, which is necessary for licensees to make administrative updates and download electronic license authorizations.

Email address - All filers [must provide an email address](#) on all applications. When an email is provided, applicants will receive an official electronic copy of their licenses once granted (allow incoming email from authorizations@fcc.gov). If no email is provided when filing applications will be rejected. ARRL VEC suggests that those without access to email to use the email address of a family member or friend.

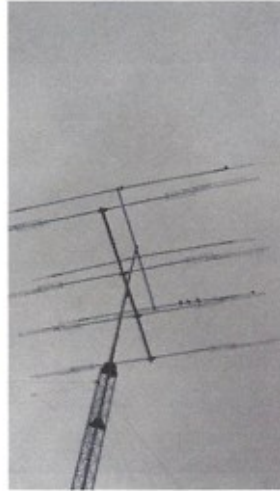
FCC Application Fee - The \$35 application fee applies to new, renewal, rule waiver, and modification applications that request a new vanity call sign. The fee is per application.

Administrative updates, such as a change of name, mailing or email address, and modification applications to upgrade an amateur radio licensee's operator class or to request a sequentially issued call sign, are exempt from fees.

The fee will be per application.

When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate who then will have 10 calendar days from the date of the email to pay through the FCC [CORES](#) system

Ham Radio Equipment for Sale



Yaesu - FP-2000 Power Supply
Yaesu - DMU-2000D
Yaesu- FT-2000 F/50 MHz Transceiver

Tresco 35 Ft Crank Up Tower
KT34 (A) Upgrade to KT34M2

Cushcraft-A3Ws 12&17 Meter Beam

Me- 30M2 Beam

Kenwood TL-922A Linear Amp

Me-6M beam

Items were purchased new. Make offer for all items as a package.

Contact - Richard Smith / WD6FF
Madera County Amateur Radio Club
559-323-1114
richgff@sbcglobal.net

Fresno Amateur Radio Club



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

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



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\$700 OBO
contact: Richard (559) 285-9772
or rpolson47@gmail.com

Tnx/73 N6FUB



The donuts will be back next month!



Looking for a manual for the HiGain Thunder Bird Beam or parts and info on balun
Also want Yaesu microphone YE-17
Dennis KI6NVG 559 323-7386

ARRL Field Day

ARRL Field Day is the most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.



2024 FD will be June 22-23

Always a good idea to mark it on your Calander!

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) _____

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

