SKIP

FRESNO AMATEUR RADIO CLUB, INC.

A Fresno Amateur Radio Club Newsletter Jan., 2023 Volume 86, Issue 1

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."

FARC Next Event-
Meeting Jan. 13
Fri. at 7 P.M.

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

President Stu WB6VRJ presenting Rob KM6SRR with the Allen Ross 2022 award.

QCWA (Quarter Century Wireless Association) will meet again on January 24. 12 noon on the fourth Tuesday of the month, starting in January, at Jeb's Blueberry Hill Cafe
3851 N Blackstone Ave Fresno CA 93726

Meanwhile we still meet on the air (146.85) on the Monday before the fourth Tuesday of the month.

See the last page of Skip for this years dues info.

PREZ SEZ:

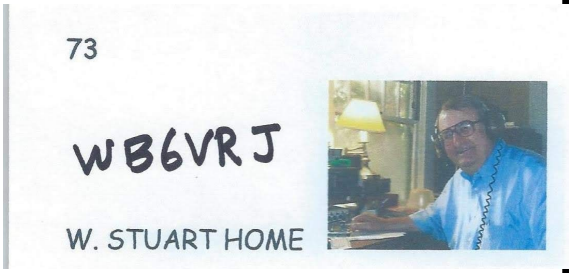
It is with pleasure that I read the ARRL December issue of QST. Lotsa good articles in there-and a couple of them are attractive to me-combination transceivers-using components this ol' 6V6 chap loves to look at and learn about.

There is one article/feature that really caught my eye: Page 63 - THE 2022 FIELD DAY scores; and there was our own **K6MI, John**, listed as number 1 in the category 1A-Battery. great going John and congrats to you!

I hope everyone had a great Christmas or Hanakah, or Winter Solstice day and got what they wanted for Hm activities! Here comes the New Year, and I wish everyone the best for this new year, as we look forward to Field Day, Picnic, camping out, Swap Meet, and in the far future, Christmas Dinner!

You all deserve an accolade for your hamming experience.

Here's wishing you the best.



Marcus KG6QNY is the newly elected treasurer.
Rob, KM6SRR, continues with the 2m antenna project at the club meetings. Next opportunity is at the January meeting. Let Rob know if you are interested in making one to help him bring the right number of parts.

FARC– New Members! 2022 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:

Stuart Home, WB6VRJ President	wb6vrj@w6to.com	(559) 485-8659	12/2023
Ken Holden, WA6OIB VP	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
Rob Egan, KM6SRR	egan@netptc.net	559) 281-4730	12/2023

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

FARC meeting Friday Jan. 13. 2023 7 P.M.

VHF Contest Jan. 21-22 Sat. 11 A.M. to Sunday 8 P.M.

FARC meeting Feb. 10, 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*.

2022 Christmas Dinner

KM6SRR Allen Ross Award

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	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

1/22 Aram KD6STR
1/27 Stephen AG6JI
1/29 Joseph KN6QLE

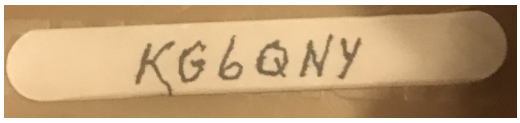
Anniversaries

1/04 Chris KD6HTV
1/07 Candace & Rob KM6SRR
1/19 Joan & Perry K6XJ
1/25 Glenita KB6PJN & Jack WY6B
1/31 Gloria & Mikeal KM6MRT

The monthly attendance prize!

The winner, Marcus KG6QNY, was present at the drawing of $30.

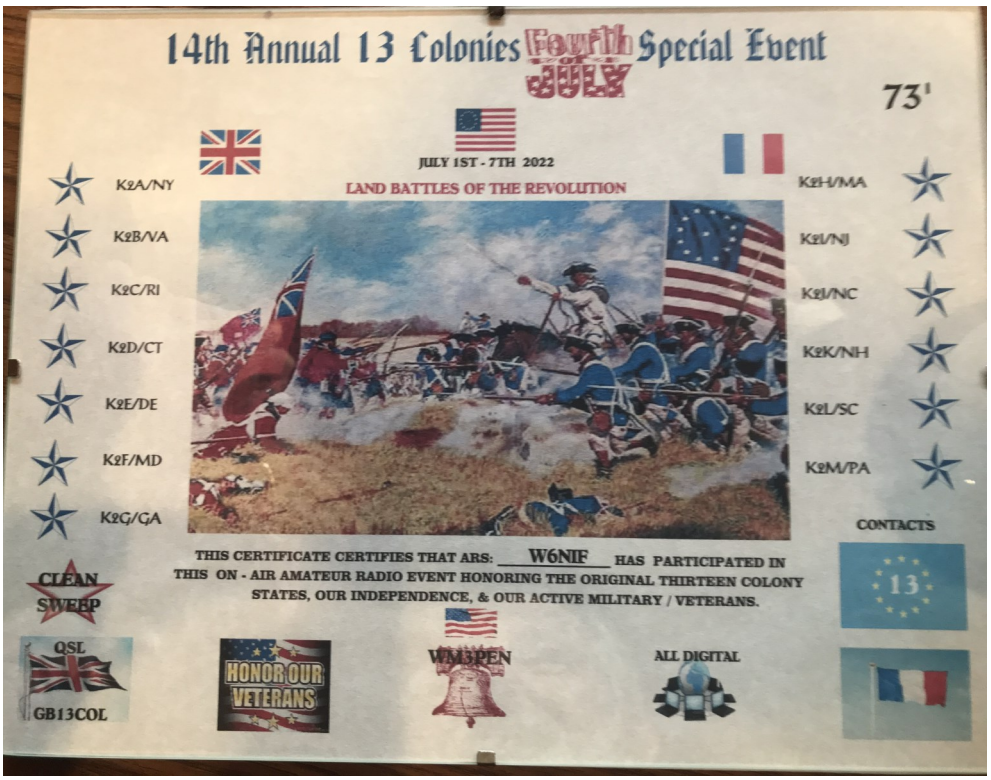
Next drawing will be $10 at the Jan. meeting. If winner is not present it will go up $10 a month until some-one wins and is there to claim it.



Tis The Season
I read Stu's 'Battery Tester' article remembering how many different ways I did (or didn't) check batteries before tossing them. I certainly used the lamp test but for me the bigger issue was having something *anyone* can use, not just the technically minded, willing to deal with wire and clips.

Several seasons ago, after finding that many good batteries were being thrown away because they were in series with one weak battery, I purchased the Amprobe BAT-250 (~$10) The tester checks most common primary batteries with an appropriate load. It even checks 9V and button batteries and displays the results. It is fast and certainly easy enough for the family to use… so they do.

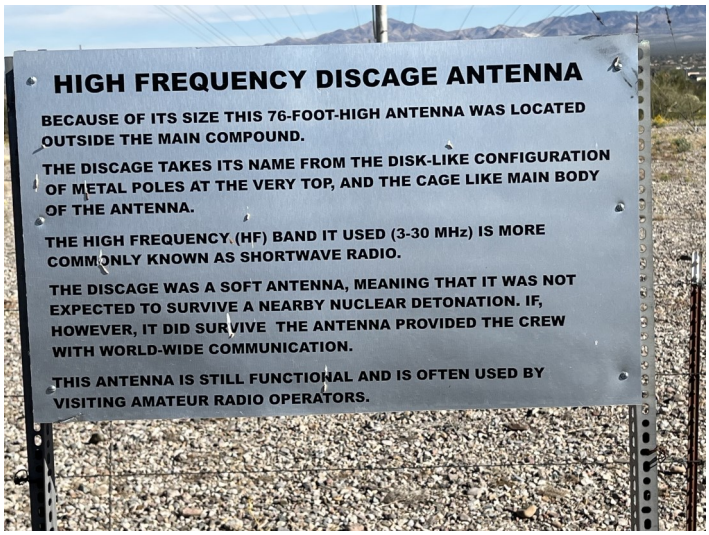
Jeffry WA6IMA



Jim W6NIF was awarded this certificate for working all the 13 colonies special event stations. A fun event every July.

Larry WA6ZBL

This past November, I had the opportunity to operate HF using a discone (sometimes called a discage) antenna located at the Titan Missile Museum, about 25 miles south of Tuscon, Arizona. The Titan ICBM missiles were first placed into service during the cold war in 1963. Now a decommissioned facility, the museum has preserved one of the Titan missile silos along with support areas. Part of the communication system for the various missile sites around the country included high frequency radio using discone antennas built by Collins Radio. The antenna is available for use by appropriately licensed amateur radio operators during the hours the museum is open.



The antenna was actually two separate radiators on one support. The discone portion covers 6-30 mHz. A separate caged vertical on the same support was used to cover 3 – 6 mHz using a relay to switch the feed points so the assembly may be referred to as a discage antenna. The discone is broadband and presented a fairly low SWR from 40 through 10 meters. The internal tuner in my rig had no problems matching the load. It is a large structure, nearly 80 feet tall.

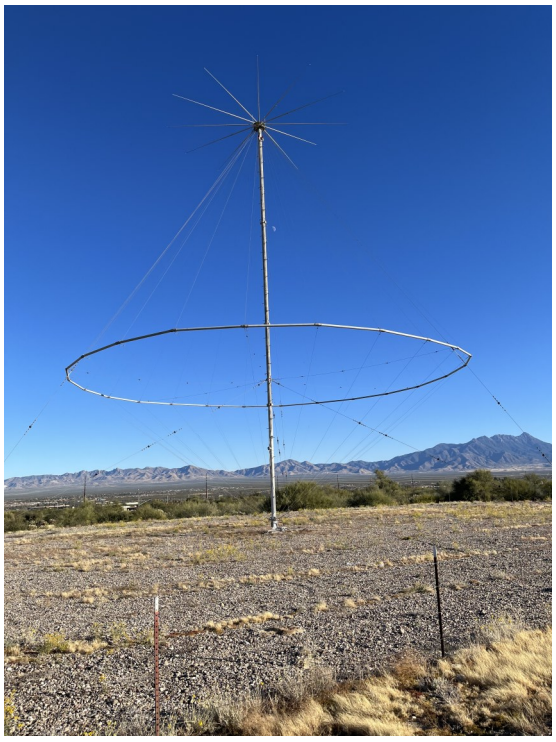
During most of the afternoon, skip was short with good contacts into Utah and Texas. Later, shortly before their closing time, I started hearing east coast and DX on 15 and 10 meters but was not successful in working those stations.

There is a lot of information on-line about this antenna. A couple of good links for further information are:

https://titanmissilemuseum.org/museum/ham-radio-operators/

https://www.gvarc.us/titan-missile-museum.html

Thanks to the Arizona Green Valley Amateur Radio Club for their efforts to maintain this historical antenna.



Tube of the Month

LS180

At the beginning of WWII, the British had deployed their early warning RADAR that would prove so useful in the "Battle of Britain". There were military officers that didn't think that the Germans had working RADAR. They became suspicious when one of their bomber squadrons was ambushed by German fighters while out at sea resulting in very heavy losses. The British scientists had information that indicated that the Germans had advanced RADAR and the allies had little knowledge about its capabilities. They needed to locate where the systems were. Intercepted messages referred to something called "Freya" and another named "Würzburg" that seem to indicate RADAR systems. A reconnaissance Spitfire got a photo of something suspicious on the French coast. It looked like a 10-foot diameter dish on a trailer. It was suspected this was a Würzburg unit. It was relatively close to England and the military wanted it. A beach landing would be very difficult to do and gave the RADAR crew a chance to escape. A small commando raid had a better chance of capturing the RADAR system so the Chiefs of Staff ordered Operation Biting to be planned. A company of the British 1st Airborne Division would parachute into France in late February, 1942. The target was near Bruneal, France and the common name for the operation became the Bruneal Raid. The raid was a big success with low casualties and the RADAR plus a German technician were bagged.

The results of the reverse engineering of the RADAR are available today. The amplifier tube was a Telefunken LS180 in a simple oscillator circuit at around 500 MHz. The oscillator had a pulsed output of about 10 KW using a 12 KV supply. The filament was 6.2 volts at 15 amps. Pairs of grid and plate pins minimize the lead inductance and maximize the upper frequency.

The aiming accuracy of the system was about 2 degrees in azimuth and 3 degrees in elevation. The Würzburg was designed to be short range and useful in directing anti-aircraft guns while the Freya was used for long range warning. All the German anti-aircraft systems were configured to display IFF (Identification Friend or Foe) signals from their own aircraft. At night, the RADAR directed night fighters to their bomber targets. The Würzburg was not particularly accurate and the British developed counter measures to fool it. One jamming system made a British bomber look like three. Later in the War, a Würzburg with a larger antenna was deployed to protect high value targets like the V2 rocket works at Peenemünde. Others were deployed to larger cities to direct flak. The American 8th Airforce could attest to its performance.

The tube in the photo was made in 1944 and indicates that a filament voltage of 6.2 volts was optimum for that tube. It also has Wehrmacht and Luftwaffe inspector marks. The illustration is of a Würzburg in operation.

Visit the museum at N6JV.com

Norm N6JV

Pictures from Aaron K6USY
[LM-300HD Low Vibration for Icom ID-5100](#) installed in my 2019 Honda CRV.

Rep. Bill Johnson Introduces Bill to Eliminate Private Land Use Restrictions on Amateur Radio

Congressman Bill Johnson (OH-6) introduced a bill in the U.S. House of Representatives (H.R.9670) on Thursday, December 22, 2022, to eliminate private land use restrictions that prohibit, restrict, or impair the ability of an Amateur Radio Operator from operating and installing amateur station antennas on property subject to the control of the Amateur Radio Operator.

The exponential growth of communities subject to private land use restrictions that prohibit both the operation of Amateur Radio and the installation of amateur station antennas has significantly restricted the growth of the Amateur Radio Service. These restrictions are pervasive in private common interest residential communities such as single-family subdivisions, condominiums, cooperatives, gated communities, master-planned communities, planned unit developments, and communities governed by community associations. The restrictions have particularly impacted the ability of Amateur Radio to fulfill its statutorily mandated duty of serving as a voluntary noncommercial emergency communications service.

Congress in 1996 directed the Federal Communications Commission (FCC) to promulgate regulations (Public Law 104-104, title II, section 207, 110 Stat. 114; 47 U.S.C. 303 note) that have preempted all private land use restrictions applicable to exterior communications facilities that impair the ability of citizens to receive television broadcast signals, direct broadcast satellite services, or multichannel multipoint distribution services, or to transmit and receive wireless internet services. ARRL attempts to obtain similar relief for Amateur Radio were rejected by the FCC with a statement such relief would have to come from Congress.

ARRL Legislative Advocacy Committee Chairman John Robert Stratton, N5AUS, noted that Congress, in 1994 by Joint Resolution, S.J.Res.90/H.J.Res.199, declared that regulations at all levels of government should facilitate and encourage the effective operation of Amateur Radio from residences as a public benefit. He continued by stating that "H.R.9670, the *Amateur Radio Emergency Preparedness Act*, is intended to fulfill that mandate and preserve the ability of Amateur Radio Operators to continue to serve as a key component of American critical communications infrastructure."

ARRL President Rick Roderick, K5UR, and Mr. Stratton both extended on behalf of the ARRL, its Members, and the Amateur Radio community their thanks and appreciation for the leadership of Rep. Johnson in his tireless efforts to support and protect the rights of all Amateur Radio Operators.

From the ARRL website:

http://www.arrl.org/news/amateur-radio-featured-on-montana-public-television

Nice short from journalism students at the University of Montana about amateur radio.
Direct link: https://www.montanapbs.org/programs/ham/

Super Glue & Baking Soda; Does *this* really work?

It's is kind of amazing. Who wodda thought.

https://www.youtube.com/watch?v=ImLAmfM_AgA

Jeff WA6IMA

Wanted

Programing cable and software for:
Motorola Spectra Model DA5km+067m
Bendix King model Emh5990a 54721
Or help to program these radios
Dennis KI6NVG 559 323-7386

Jerry K6PKO and Bill W6GM at swap meet

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 a Kenwood TH-D74A. Handheld

Thanks Aram KD6STR

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 membership 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
73
KN6WEH Hal 559-930-0944

Prez Stu WB6VRJ at Dec. dinner

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_____
Birthday (Month/Day)_____ Wedding Anniversary (Month/Day)_____
ARRL Member?_____
Additional Family Member(s) in same household ($5 each)
Spouse Name_____Call_____
Son/Daughter Name_____

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