

SUNSPOTS

REDWOOD EMPIRE DX ASSOCIATION

P.O. Box 750834, Petaluma, CA 94975

A DX and Contest-minded Amateur Radio Club serving the California coast north of the Golden Gate Bridge

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Visit our Web Site at <http://www.redxa.com/>

Our next meeting is December 12—the gala holiday dinner. There will be prizes, a special menu from Chef Daniel, and installation of our officers for the coming year. Spouses and significant others are encouraged to attend (they can win the prizes too!)



REDXA President's Commentary



Using CW of course!

Less than a week after my portable operation for CQP in Trinity county I was off to the wilds of Idaho to join some friends on their annual deer hunting trip. We camped in the Boise National Forest on the banks of the upper Boise River about 50 miles east of Boise. As I am not a hunter, I brought along my Icom IC 7300, a Spiderbeam fiberglass extension pole, and my trusty Sotabeams "Band Hopper" antenna--a wire dipole for 20-30 and 40 meters. The Band Hopper change bands by connecting or disconnecting alligator clips. The feed line is RG174(very small diameter). I used this set-up for more than 3,000 qsos during the ARRL "National Parks on the Air" in 2016. It works great! I set up my "shack" in a canvas shelter that was used to park a quad motorcycle.



K6YEU on the road. Check out those pants!

Almost all my operation was on 40 SSB. It was the best band for me at the qth, which was in a canyon and was surrounded by high mountains. I was amazed how well I got out. I did no CW as I needed an adapter to plug it into the rig which--par for the course for me--I forgot at home!

My first qso was a check in to the "Noontime Net" on 7283.5. This seems to be quite popular as the net takes check ins for at least 2 hours, but don't really do more than catalog the check-ins. It seems that the reason for the net is to

check in. Period.

I made several qsos over the course of a week mostly in the West: CA,ID,NV,OR,CO,UT,WA,MT and VE7. I did work Perdue University in Indiana for School Club Roundup which was my best DX. I heard VK9XG on 40cw but no key=no qso. One memorable qso was with Dana, N6DTR, near Sacramento who did a phone patch for me to call my friend's wife in Nampa ID to let her know all was well with us. Cell phone coverage is non-existent where we were. This was my first experience ever with phone patching so pretty cool!

Other interesting qsos were with K7JRO on a SOTA peak in WA, KK7AIR in Georgetown,CA who collects and flies bush planes, W0MSN (my one qso on 20m) who was portable on the shores of Lake Superior in Wisconsin running qrp with his FT-991, W1AW/6 at Pacificon with op Robin, a YL from WA. Heidi another YL who was portable on the seashore of the Washington coast was also qrp,

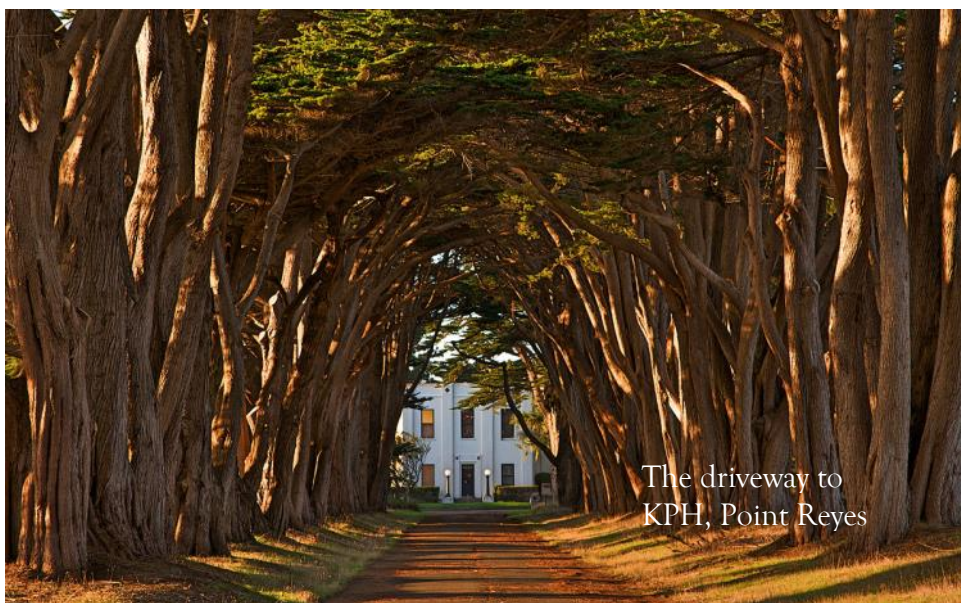
The last day was good fun also as I worked two Boy Scout groups active in "Jamboree on the Air". First with W6BSA at Beale Air Force base in CA, talking with 3 boys and their leader. The second group was signing AD7VL from Orting,WA (near Tacoma) and consisted of the scout leader, six boy scouts, and an old timer, W7GHW, who was "Elmering" the group.

I ended up with a total of 23 qsos for about a week on the air. Not a lot but all were "rag chew" type which I enjoyed greatly. One reason I brought an HF rig was in case of an emergency. Having no cell service and the nearest phone nearly an hour away it was nice to know I could have called for help if need be.

If you haven't tried portable operating you don't know what you are missing. As the Nike commercials say "just do it!"

73, Fred/N6YEU/7





KPH Software Defined Receivers

You can now listen to the LF, MF and HF bands using the same antennas the operators at KPH use --from the comfort of your computer no matter where you are in the world.



We have installed several Kiwi Software Defined Receivers (SDRs) covering all frequencies from 0 to 30Mc - and made them publicly available via the Internet.

The LF/MF receiver uses a Marconi T antenna while the HF receiver used a TCI-530. Both are located at the KPH receive site where electrical noise is extremely low.

We are still fine tuning the installation but the project has reached the point that it's ready for you to use. Here are the links.

For LF/MF, go to: <http://198.40.45.23:8072/>

For HF, go to: <http://198.40.45.23:8073/>

FAST		K6KPH		DIRECT	
		RADIOGRAM			
AROUND THE WORLD		Maritime Radio Historical Society		TO SHIPS AT SEA	
CONFIRMING QSO WITH: _____			THE MARITIME RADIO HISTORICAL SOCIETY STATION K6KPH USES THE TRANSMITTERS RECEIVERS AND ANTENNAS OF HISTORIC RCA COMMERCIAL MORSE STATION KPH WE WISH YOU FAIR WINDS AND FOLLOWING SEAS. MRHS P.O. BOX 392 POINT REYES STATION, CA 94956 WWW.RADIOMARINE.ORG		
DATE: _____ UTC: _____					
FREQ: _____ QSA: _____					
NOTES: _____					



Contest Scores by K6JS
All scores from 3830.com
[California QSO Party 2018 Oct 6](#)

M/MCnlyExp HP

Call	SO2R	Remote	CW Qs	Ph Qs	Mults	Op TimeScore	Club
W6PZ			963	456	58	25	220,458 REDXA

SO(A)Fixed HP

Call	SO2R	Remote	CW Qs	Ph Qs	Mults	Op TimeScore	Club
N6IE		x	431	314	56	9.6	107,352 REDXA

SO(A)Fixed LP

Call	SO2R	Remote	CW Qs	Ph Qs	Mults	Op TimeScore	Club
KG6N			625	280	57	21	138,795 REDXA
K6RIM			597	104	57		113,943 REDXA

SOCnlyExp LP

Call	SO2R	Remote	CW Qs	Ph Qs	Mults	Op TimeScore	Club
N6YEU			221	452	56	13.5	87,752 REDXA

SOFixed HP

Call	SO2R	Remote	CW Qs	Ph Qs	Mults	Op TimeScore	Club
N6ZFO			1020	637	58	22 2	51,372 REDXA

SOFixed LP

Call	SO2R	Remote	CW Qs	Ph Qs	Mults	Op TimeScore	Club
K6JS			941	168	58	22	183,222 REDXA
N6OJ			0	473	55		52,030 REDXA
K6TER			0	144	37		10,582 REDXA
N6TQ			80	0	33	2	7,920 REDXA

[Makrothen RTTY Contest 2018 Oct 13](#)

SO/Single Xcvr HP

Call	SO2R	Remote	QSOs	Op TimeScore	Club
N6ZFO			512	22	2,466,086 NCCC
N3RC			297		1,039,006 NCCC
K6LRN			220	6:22	829,386 MLDXCC
W6DR			220		789,142 PL259
K6MM			160	6	552,526 NCCC

[CQ Worldwide DX Contest, SSB 2018 Oct 27](#)

SO(A)AB HP

Call	SO2R	Remote	QSOs	Zones	Countries	Op TimeScore	Club
K6SRZ			230	59	109		103,152 NCCC
K6RIM			60	23	35	1.9	9,976 NCCC

Continued next page

SOAB LP

Call	SO2R	Remote	QSOs	Zones	Countries	Op TimeScore	Club
K6MM			21	13	17	0.5	1,380 NCCC
N3RC			2	2	2		8 NCCC

[ARRL Sweepstakes Contest, CW 2018 Nov 3 Claimed Scores](#)**Single Op LP**

Call	SO2R	Remote	QSOs	Sections	Op Time	Score	Club
K6JS			704	83	22.5	116,864	REDXA
N6YEU			253	71	11.5	35,926	REDXA
WW6D			64	37		4,736	REDXA

SO Unlimited HP

Call	SO2R	Remote	QSOs	Sections	Op TimeScore	Club
K6SRZ			1000	83	19:35	166,000 REDXA
N3RC			503	79		79,474 NCCC
K6RIM			352	83		58,432 NCCC
K6JS			41	21		14,000 REDXA

[ARRL Sweepstakes Contest, SSB 2018 Nov 17](#)**SO Unlimited HP**

Call	SO2R	Remote	QSOs	Sections	Op TimeScore	Club
W6PZ(K6SRZ)			1404	83	20:41	233,064 REDXA
K6RIM			154	78		24,024 NCCC
W6DR			137	81	5:39	22,194 NCCC

Single Op LP

Call	SO2R	Remote	QSOs	Sections	Op TimeScore	Club
N3RC			343	69	47,334	NCCC

[CQ Worldwide DX Contest, CW 2018 Nov 24](#)**SO(A)AB HP**

Call	SO2R	Remote	QSOs	Zones	Countries	Op TimeScore	Club
N3RC			400	66	150		223,560 NCCC
K6MM			313	74	143		177,940 NCCC
K6RIM			310	59	147		177,366 NCCC
K6SRZ			288	81	141	9	172,494 NCCC

W6FB's comments on FT-8 and contesting

Reprinted with light editing from the Northern California Contest Club's newsletter "The Jug"

Once in a while something new comes along to grab the attention of the ham radio world. In the 1950s it was Single-Sideband, then in the 1980s packet radio became a big hit. We all know the results of the SSB revolution - we use this mode quite often. Packet radio was a huge hit in the 80s, at first leading the way at VHF and UHF showing huge data transfer potential (especially with the GRAPES 56K modem) and eventually evolving into today's WIFI. At the same time it spawned a series of HF modes - starting with HF Packet, then, over time, morphing into the various PSK modes for transferring data a little bit at a time. These modes grabbed the attention of various signal and mathematical types who applied mathematical analysis and techniques to the signal coding, leading the W1JT's release of the FT-8 mode about one and a half years ago.

The thing that really makes these modes stand out is their use of mathematical predictive phase encoding along with forward error correction to determine what successive bits should be based on previous bits and apply the modulation thusly. On the receive end the decoders apply the same techniques to determine that a bit should be a one or zero based on the mathematical sequence of previous bits. With all this going on the decoder is able to properly decode data streams even though much of the stream simply cannot be heard by the human ear — it is down in the noise! These techniques are very important in the true DXing of receiving telemetry from interplanetary space probes. Folks like Nobel Laureate Joe Taylor, W1JT, have brought them to ham radio.

What has all this to do with contesting? The techniques in place over the past decade or more have required significant amounts of time for the data stream to be transferred and decoded, making them very much un-useful for contesting. Taking five or so minutes for a complete exchange to occur is not something most of us want to do in a contest. This began to change with the release of FT-8. This mode uses 15-second transmission bit streams that are precisely timed to string together QSO data 75 bits at a time. This doesn't seem like much, but much of the data we exchange in a contest will fit within one of these streams. By collating several of these 15 second streams, a single two-way QSO can occur in six exchanges, taking 90 seconds.

The initial FT-8 protocol, and its use, was studied at length by its creators, and a second, more versatile protocol was created by adding just two more bits for a total of 77. This is the protocol in the WSJT-X V2.0 version currently in testing. As we learned in the November NCCC meeting, W0YK and AA5AU are very active in the FT-8 development, and sponsored a contest — the FT-8 Roundup-- held on Dec 1-2. Apparently, there was lots of participation though it's too early to see the stats. FT-8 has also been included in the RTTY Roundup set for January 5-6 or 2019. In that contest you will be able to choose between RTTY, FT8 or other HF digital modes for your contest QSOs. This should make for an interesting event. But, how useful will each of these modes be?

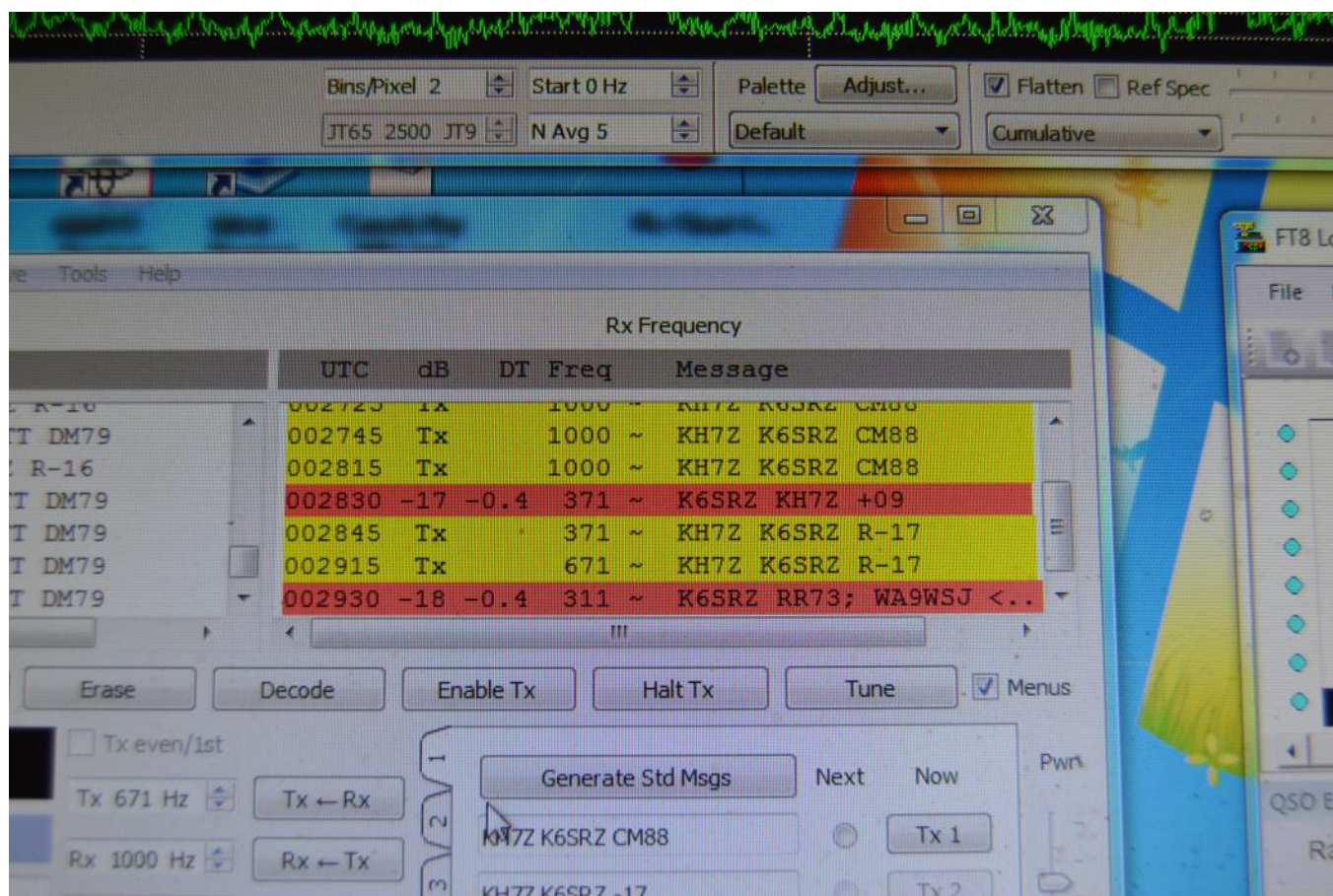
As W0YK explained in his presentation, we will not be able to use overlapping transmissions (as is the case in the FT-8 DXpedition fox-hound mode) for QSOs. This means that while we might be able to overlap one or two transmissions as sort of a TU, CQ scenario, for the most part it will take the full 90 seconds for each QSO. RTTY takes far less, especially if you are able to do SO2R, SO3R, or in the case of W0YK, SO4R. Essentially RTTY is still king of digital in the contesting world. But it is very important that we try the FT8 mode and show what it can, and cannot do in the contesting environment. It is perhaps the latter that is most important. The creators of the mode are very interested in what we do, and are open to evolving the mode to better accommodate our needs. Today it might take 90 seconds for one QSO, but in the future that may be significantly reduced, or perhaps we may be able to make QSOs with

multiple stations at a time. The possibilities are very exciting, and we should do all we can to encourage the development and evolution of the modes.

There is one thing, though, that we need to watch out for. Contesting is for us, not for fully-automated operation. Per FCC rules, we must be involved in the operations, selecting which station(s) we contact and when. The software may point out stations that we can call, but we must be involved in the QSO itself. As a station builder and experimenter, I may find it very interesting to create a fully-automated station, but when it comes to operating *I* want to be in charge, not the computer. Until and unless the FCC changes its rules, we all must operate this way.

Remember RTTY Roundup is an NCCC Focus contest - there is a gavel at stake and we want to add it to *our* collection! Try both modes in the RTTY Roundup - read the rules for how to log and submit the log information, but this is a great opportunity to be part of a great experiment in evolving our data techniques

73!
Jack, W6FB



Above, a screen shot of an FT-8 QSO between K6SRZ and KH7Z, the recent Baker Island DXpedition. This is in the so-called “fox and hound” mode. K6SRZ is the hound.



Echos of the Fire of 2017

Left: rebuilding WX6B's home. Completion scheduled for August 2019.

Below: a beautiful quilt, a thank-you gift from Saraj, KU6F, to the editor and spouse for help after the fire



REDXA Calendar of Upcoming Events

by Doug WW6D

*Dec 12 * REDXA Holiday Party and Raffle*

Dec 29-30 Stew Perry Topband Challenge

Dec 31-Jan 1 Straight Key Night

Jan 5-6 ARRL RTTY Roundup

*Jan 9 * REDXA Monthly Meeting*

Jan 12-13 North American QSO Party CW

Jan 19-20 North American QSO Party SSB

Jan 25-27 CQ 160m Contest CW

*Feb 13 * REDXA Monthly Meeting*

Feb 16-17 ARRL Intl DX Contest CW

Feb 23-24 North American QSO Party RTTY

Mar 2-3 ARRL Intl DX Contest SSB

*Mar 13 * REDXA Monthly Meeting*

*Apr 10 * REDXA Monthly Meeting*

Apr 12-14 Visalia Int'l DX Convention

Refer to <https://www.contestcalendar.com/contestcal.html> for more contest information.



November Meeting Minutes

by Doug WW6D, Co-Secretary

Vice President Jim K6JS, called the meeting to order at 7:35 pm, November 14, 2018 at the Boulevard Cafe, Petaluma, CA. In attendance were 23 members and guests.

The Treasurer's report was presented by Bill W6IYS and approved by the membership. By the club's rules, annual dues are now due. Minutes of October's meeting were also approved.

New member Mike KI6HHJ was voted in by the membership.

Rick N6GY announced that he has a US Tower Model MA40 tubular tower along with his SteppIR antenna ready to take down and offered it all gratis to the first requester.

The Nominating Committee, composed of Fred N6YEU and Terry K6TER, presented the current status of their recruitment efforts for 2019 officers:

President: Jim K6JS

VP: Roger N3RC

Secretary: Doug WW6D

Treasurer: TBD

Directors: Steve W6SFT, Josh W6XU, Bill WX6B

(Past President Gabe KJ6AZU will serve as a director, per the ByLaws)

Green Keys Night

A New fun, and non-competitive Event for RTTY

N0AX suggested I contact this list with the announcement, and N4GN was kind enough to grant me access. Please consider spreading the word. Any questions just let me know. Thanks! 73 jeff wk6i

The Greenkeys online group is happy to announce the first-ever Green Keys Night (GKN), to be held concurrent with Straight Key Night on January 1st, 2019, from 0000 to 2359 UTC. As with SKN, GKN is an event and not a contest.

"Greenkeys" is not a reference to eco-friendly operating - though members certainly are keen on equipment recycling - but rather is a group dedicated to the restoration and use of vintage mechanical teleprinters and related equipment. The term "greenkeys" itself refers to the color of the keys on Teletype machines.

Participants are encouraged to get on the air and simply make enjoyable, conversational RTTY QSOs. Operate on all authorized Amateur frequencies. Please follow established band plans and be mindful of SKN QSOs. RTTY modes only. Call "CQ GKN".

The use of mechanical teleprinters is preferred, or simply get on the air with the oldest equipment you can scrape together. Real heavy metal Teletypes to be sure, but if that isn't available: analog hardware modems, VT100 terminals, pre-Windows computers, etc. And vacuum tubes. ;) And maybe fire up that boatanchor rig that never gets enough air time.

Please no brag tapes/files. Please no pre-recorded messages. Have a real conversation by hand typing it keyboard to keyboard. If you are slow we'll happily wait. (A CQ macro is okay but you would have better bragging rights if you hand typed that too.)

But even if you don't have any old equipment, do get on the air and have some fun QSOs the old fashioned way!

Email wk6i.jeff@gmail.com to let us know you participated. There are no points scored, but if you'd like to share with us your favorite or most interesting QSO (worked or heard), your log, and what equipment you operated with (including photos), please do.

Please note that there is a RTTY contest concurrent with GKN, the SARTG New Year RTTY Contest. The contest runs from 0800 to 1100 UTC. As long as you have your RTTY working why not join in the contest and then return to more GKN fun! (For info: <http://www.sartg.com/contest/nyrules.htm>)

The Greenkeys online group is an email list devoted to the discussion of older radio teletype (RTTY) gear including mechanical teleprinters (Teletype, Kleinschmidt, etc.), terminal units, paper tape, gears, cams, oil, and anything else related to TTY/RTTY. To join the group, visit <http://mailman.qth.net/mailman/listinfo/greenkeys>

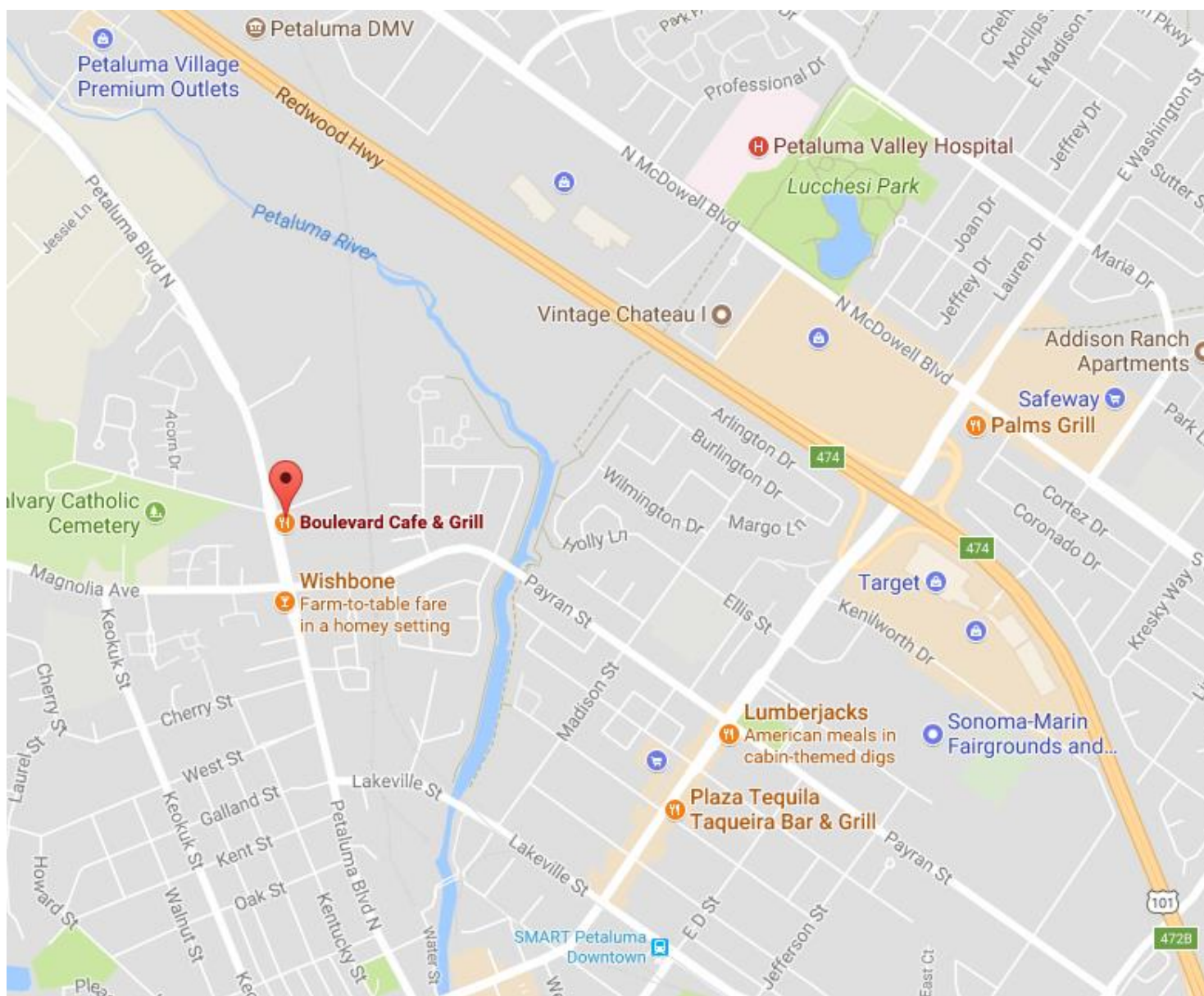


More of Marilyn's (N6VAW) photos from the recent Baker Island (Hawaiian Shirt Night) presentation. Love those smiles.



Boulevard Café & Grill

1096 Petaluma Blvd. North,
Petaluma, CA



Redwood Empire DX Association meets the second Wednesday of each months at the Boulevard Café and Grill at 1096 Petaluma Blvd. North. Petaluma, CA.