



P.O. Box 6421 Auburn, CA 95604

April 2021

<http://w6ek.org> [info@w6ek.org](mailto:info@w6ek.org)

### At The Key of SFARC:

#### **PRESIDENT**

Brian Gohl, AI6US  
[AI6US@titaniumsatellite.com](mailto:AI6US@titaniumsatellite.com)

#### **VICE PRESIDENT**

Greg Dolkas, KO6TH  
[ko6th.greg@gmail.com](mailto:ko6th.greg@gmail.com)

#### **SECRETARY**

Michele Bauer, WH7QC  
[mickeybauer2012@gmail.com](mailto:mickeybauer2012@gmail.com)

#### **TREASURER**

Jeff Morgan, KM6RGO  
[jamontrail@gmail.com](mailto:jamontrail@gmail.com)

#### **DIRECTORS**

Gerry Brentnall, WA6E  
Wayne Stilwell, W6DT  
Chip Bautista, KM6MDF

#### **FIELD DAY CHAIRMAN**

*To be filled*

#### **REPORTERS**

Satellites: Greg, KO6TH  
Sunshine: Roy, WH7DH

#### **GROUPS io**

Dennis Gregory, WU6X

#### **PIO**

Scott Vogelsang, WA6YNE

#### **REPEATERS**

145.430 (-0.6 MHz/PL 162.2)  
440.575 (+5.0 MHz/FUSION)  
223.860 (-1.6 MHz/PL 110.9)

#### **CLUB NET**

Thursdays, 7:30PM, W6EK/R 145.430

#### **CLUB MEETINGS**

Second Friday of the month,  
Online Zoom starts @7:30pm  
Meeting ID: 962 6167 5605

#### **CLUB BREAKFAST**

*On hold until further notice*

#### **NET CONTROL OPS**

Dave Jenkins, WB6RBE  
Orion Endres, AI6JB  
Chip Bautista, KM6MDF

#### **NEWSLETTER EDITOR**

Barbara Anderson, W6EVA  
[anderson51@wavecable.com](mailto:anderson51@wavecable.com)

#### **WEBMASTER**

Herb Garcia, KM6JBI

#### **STATION TRUSTEE**

Clyde Campbell, AB4CC

#### **VOLUNTEER EXAMINER**

Andrew Silvester, K6OP

### Calendar of Events

April 4<sup>th</sup>

*Easter Sunday*



April 9<sup>th</sup> @ 7:30pm

**Zoom General Meeting**

*Breakfast at Mel's Diner may begin again in April*

May 15<sup>th</sup> @ 9:00am

**Donuts & Coffee in the Park**

June 25<sup>th</sup> - 27<sup>th</sup>

**Field Day**

~ ~ ~

**Join us every morning @ 7:30am for the Coffee Break Net on the W6EK repeater 145.43, PL 162.2**

### Inside this issue

- *President's Message*
- *"What is it?" question*
- *Board Meeting Minutes*
- *General Meeting Minutes*

**We encourage members to receive Sierra Signals via email to save the Club the cost of reproduction and mailing**

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## President's Message

*By Brian Gohl – AI6US,  
President*

### Radio Events are Filling up the Summer Calendar

As we vaccinate in ever increasing numbers and flirt with the reopening of California, the summer calendar is filling with many radio events. The Canyon's 100k run (contact - Joe, K6SAT) kicks off the volunteer communications event season on April 24<sup>th</sup>, then the next weekend on May 2<sup>nd</sup>, the CERA Enduro event raises a little dust in the foothills above Georgetown (Chip, KM6MDF).

May 15<sup>th</sup> is Donuts and Coffee in the Park in Meadow Vista, then on May 29<sup>th</sup> the club will have a working HF/VHF/UHF station and information booth at the Georgetown Fly-in (Brian, AI6US). June 26-27<sup>th</sup> will be the ARRL Summer Field Day (Gerry, WA6E) and the challenging 100 mile Western States Endurance Run between Lake Tahoe and Auburn (Joe, K6SAT). Later in the summer on July 24-25<sup>th</sup> is the equestrian endurance Tevis Cup race, which follows the similar path over the Sierra Mountains (Rich, N6KLB).

No experience is necessary and opportunities exist for every skill level! I learn so much while volunteering and working alongside a radio Elmer. An excellent way to help out in the community, promote amateur radio, sharpen your communications skills, and become proficient in portable radio operations! Please contact these event organizers to join the volunteer teams.

### And the Field Day Survey Says...

Thank you to everyone who participated in the SFARC Field Day survey last month. 56 responses with over 80% voting for an in-person event with meals hosted by the club. Based on your feedback, Field Day planning meetings have started on Zoom with great participation. Thank you to Gerry, WA6E for taking the lead on the planning sessions. An application has been submitted to the USFS for holding the event at Blue Canyon Airport and alternative locations are being discussed in case the USFS does not reopen and approve our special use permit.

The ARRL has amended the 2021 rules to once again provide an aggregated club score category. You might chose instead to work this Field Day from home or a portable set-up with family or a smaller group of friends. No matter how or where you participate in Field Day, your score will contribute to the Sierra Foothills ARC score! Even if circumstances change and we are unable to hold an in-person event or members are unable to



attend, we are making plans to include everyone from the new licensee to the seasoned FD veteran. SFARC will host the 24 hour zoom room, award FD pins for first-time participants, t-shirts and other prizes to recognize event contributions and top score submissions.

BTW... We need you to join the Field Day planning team. Please check out the SFARC Groups.io forum for meeting announcements and contact Gerry, WA6E to have your call added to the team.



### **SOTA Group Forming**

Many club members have been very active in activating and chasing the SOTA - Summits on the Air stations. We are putting out a call for any and all local amateur radio operators who are interested in camping, hiking and road trips for summit activation outings. A great opportunity to get out into nature, explore the region and play radio in Zero Noise Land!

Interested? Contact Dustin, W6YUE and start the adventures!

Looking forward to talking with you again, a little further down the logbook!

Until then, 73

Brian Gohl – AI6US

SFARC President

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### **Donuts and Coffee in the Park**

Join us for the Donuts and Coffee social distancing event at the Meadow Vista Park on Saturday, May 15<sup>th</sup>, 9 to 10:30am. Bring your lawn chairs and spread out across the park's soccer field. Plenty of fresh air, sunshine, and parking. The SFARC board will be serving fresh donuts and coffee, while you socialize. We request that you practice safe distancing, wear masks and let's have some fun! You never know, there might be a box or two of ham goodies in back seats and trunks that are looking for a new shack to call home. :)



Need directions to Meadow Vista Park?

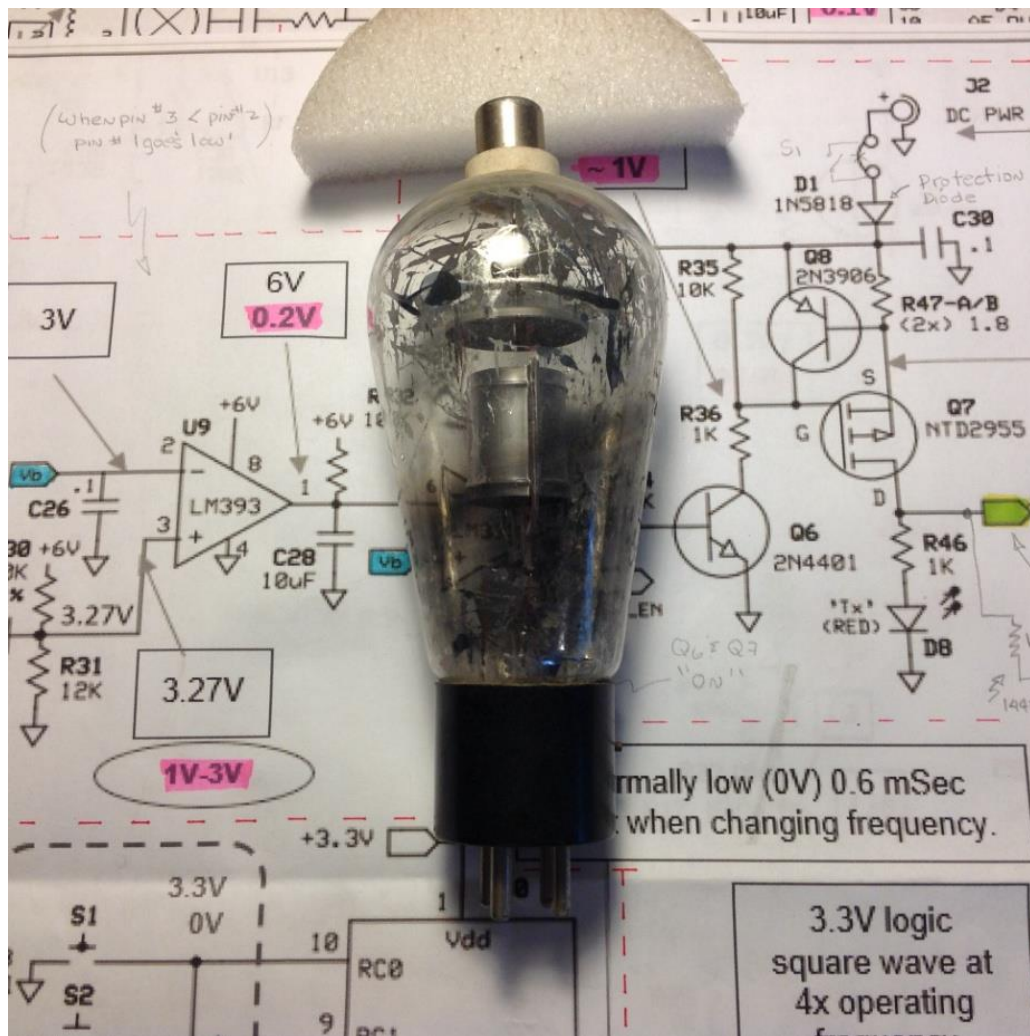
<https://goo.gl/maps/88TXauVmd2N8qbAQ9>

# What is it?

**BONUS QUESTION:** *What were they used for?*

**Extra Credit – Genius Level:** *How were they better than their older cousins?*

(Hint: : Hams used them in the 40's, 50's, and early 60's for high power transmitters)



**Answer is on page 10 of this newsletter**





## BOARD OF DIRECTORS MEETING MINUTES

### Video Conference Zoom Meeting

March 12, 2021 @ 1800

President, Brian/AI6US opened the meeting with all board members present. Vice-president, Greg/KO6TH, Secretary, Michele/WH7QC, Treasurer, Jeff/KR6MGO, Directors, Gerry/WA6E, Wayne/W6DT, and Chip/KM6MDF.

The February 2021 minutes were accepted as submitted.

Jeff/KM6RGO reported that we have 8 new members plus a new associate. He needs two volunteers to contact several club members if they are interested in renewing their membership. Michele/WH7QC and Greg/KO6TH volunteered to take on the task.

Repeater, Clyde/AB4CC reported that the club is connecting the 220 Repeater to EchoLink and Allstar node.

Sunshine/Greeters, Roy/WH7DH and Jacob reported that club members, AI/N12U, AI/N6ADT, and Clyde/AB4CC are improving in their health and healing. 😊

Newsletter, Barbara/W6EVA does a great job and thanks everyone for their contributions of pictures and articles—and to please keep them coming!

Website, Herb/KM6JBI was not present.

Groups io and Contests, Dennis/WU6X had no report at this time.

Social Media, Orion/AI6JB had no report at this time.

VE--The club is launching a Regional VE soon! 8/10 VE's are volunteering almost every week.

Volunteer, Chip/KM6MDF reported that the upcoming Enduro, we will have 5 stations with 2 people in each station for the event. There will be more information later.

Drawing, Aaron/K6ABJ reported that the drawings will commence as soon as the club meets in person.

Picnic Chairs, Roy/WH7DH and Michele/WH7QC will reach out to the Parks and Recreation since we are now in the Red Tier now.

Field Day--TBD

#### Old Business

Repeater, Clyde/AB4CC reported again the club is connecting our 220 Repeater to Allstar Link/Echo Link.

We need a budget of \$200 for the connection. Greg/KO6TH motioned and Jeff/KM6RGO seconded it that the club allows the \$200 for this connection process. The Board unanimously voted in the affirmative.

Field Day: The polling results brought 80% responders of the club who would like to have an in-person event. We will possibly have a “hybrid-type” where folks can zoom, or a day event, or even a camping event. The COVID situation will be taken into account with our event. Blue Canyon as of this point says, “no” at this time, but perhaps it will change. Nyack-we are not sure of. Some questions to be considered: Do we have hosted meals? Do we have deli items from a commercial store? Do we cancel, or table it a bit? We will announce at General meeting that we need volunteers to head and organize a committee. Contact will be Gerry/WA6E.

### New Business

Ham radio licensing classes--Orion/AI6JB. The upcoming Tech class is full, with 3 on the wait list. It will be via Zoom as the General and Extra classes have been. Orion said he would take 14 maximum; however 10 feels better due to the labs he offers in which he really needs helpers. He proposed that the fees be \$40 for all to pay and the General and Extra classes be \$40 for members and \$65 for nonmembers. The classes are “First come, first served” upon payment. Orion suggests the Ham radio classes be offered in February, May, and September. It was motioned by Gerry/WA6E with Clyde/AB4CC seconding it that the club charge \$40 to everyone who signs up for the Tech classes. The Board voted unanimously to do so.

The club needs an alternative location for our Club Board and General meetings. Some suggestions are the VFW and the Auburn Library.

Nomination Committee--we need one!

Breakfast at Mel’s could very well begin again before long!

The Board meeting was adjourned at 18:42. Submitted by Michele/WH7QC



## **GENERAL MEETING MINUTES**

### **Video Conference Zoom Meeting**

### **March 12, 2021 @ 1930**

President, Brian/AI6US welcomed all members and visitors, including:  
Bob and Anne Marie Wold/KR6MR, Steve/KJ7R, Rick/N6KLB, Barry/WB6JZL, and Tim/KD6HOF.

The “chat auction” prize was announced: MJF-259 Pro for \$75 minimum bid. They are about \$600 new or on Ebay for about \$200.

Brian led our group in The Pledge of Allegiance and then introduced the Board members and the new Ham, Joshua/KN6NUF.

Board members in attendance were:

President, Brian/AI6US, Vice-president, Greg/KO6TH, Secretary, Michele/WH7QC, Treasurer, Jeff/KM6RGO, Directors, Gerry/WA6E, Wayne/W6DT, and Chip/KM6MDP.

Greg announced our presenters for the evening:

Dennis/WU6X, "Remote Station Control"

Special guest, Dr. Bob Heil/K9EID, "Science of Audio and Beyond"

Secretary, Michele/WH7QC had no report.

Treasurer, Jeff/KM6RGO thanked the club for using "Amazon Smile" when they make purchases on Amazon.

Directors, Gerry/WA6E, Wayne/W6DT had no reports.

Director and Volunteer chairman, Chip/KM6MDF gave an update on the Enduro, which is scheduled for May 2. There will be 5 stations with 2 people manning each station. There will be more information coming later.

Joe/K6SATY of Western States announced that the Western States Enduro needs volunteers. It will be held on April 24. For more information please contact: [K6ST@ARRL.net](mailto:K6ST@ARRL.net).

Rick/N6KLB announced about TEVIS, the 100 miles equestrian endurance ride, which roughly follows western trails. There will be 22 check points, with voice communication on VHF and UHF. Each rider is tracked from start to finish. The event needs 60-70 volunteers. For more information or to volunteer, please contact: [radio@teviscup.org](mailto:radio@teviscup.org).

The February 2021 minutes were accepted as submitted.

Tonight's "Wheel of Prizes" is led by Dennis/WU6X and the prizes are:

Dutch Bro. \$20 gift card, Wireless Mouse, and a Coax Crimper.

Repeater (Station Trustee), Clyde/AB4CC reported that the club needs \$200 to connect our 220 Repeater to Allstar Link and Echo Link. The Board unanimously voted to spend the money for this venture. In this General Meeting, Jim/WA8MPA motioned, and Roy/WH7DH seconded it for the club to spend the \$200 for the connections. The General membership voted unanimously to go forward with this expenditure.

Field Day: Do we or don't we? We need volunteers for a Field Day committee. Interested persons please contact, Gerry/WA6E as soon as possible.

Tech Class: Per the suggestion of Orion/AI6JB, the entry level fees have been lowered from \$65 to \$40 for all participants. Those under 21 years of age, all will be reimbursed to them upon successful passing of the Tech exam.

The club needs a Nominating Committee. Interested persons please contact Brian/AI6US.

HamFest Chair, Orion/AI67JB reported he is not sure what is happening yet.

Breakfast at Mel's Diner may begin again in April.

New club members, plus one associate was announced:

Gerry, Eric, Jim, Greg, Lyle, Jim, and Joshua, with Marcia Reed as the Associate. Carl/N6DKV motioned and Gary/KB7QWC seconded that the SFARC Club accept these new members. The club voted unanimously in favor.

### New Business

The club is considering meeting in a new space. Any ideas please submit to Brian/AI6US. We may even consider a change of day.

Sunshine/Greeters, Roy/WH7DH (and Jacob) mentioned about AI/N6ADT, AI/NI2U, Clyde/AB4CC, and Bob/K6ZLY all doing much better health-wise, which we were all so glad to hear. We often hear some of them on the Coffee Break Net. 😊

Website, Herb/KM6JBI reported that our website is doing well. Dr. Bob Heil (our special guest) got Herb on the radio recently! 😊

Groups io, Dennis/WU6X reported 195 members on Groups io.

Contests, Dennis/WU6X reported that there are no contests this month.

ARES, Carl/N6CKV reported that the COVID numbers are going down, but to please still be careful!

Jim/WA8MPA announced that the "chat auction" for the MFJ-259 Pro, received some good bids--\$225, \$250, and then the lucky winning bid went to Doug/W2VX for \$275! Congratulations Doug!

### Calendar of Club Events

- ✓ May 15 at 9:00 am will be a SFARC "Donuts and Coffee in the Park" event—the first in-person event in over a year! Please RSVP and bring your own lawn chair as we will be still "social distancing".
- ✓ Field Day will be June 25-27

### Announcements

Club nets-Every Thursday @ 7:30 pm (145.430, PL=162.2)

Elmer Net-Every 1<sup>st</sup> & 3<sup>rd</sup> Wednesdays @ 7:30 pm (145.430, PL=162.2)

Radio Direction Finder-Every 2<sup>nd</sup> & 4<sup>th</sup> Wednesday @ 7:30 pm on Zoom, hosted by Jon/KI6RT

Coffee Break Net-Every morning @ 7:30 am (145.430, PL=162.2)

Club Breakfast-Last Saturday @ Mel's Diner in Auburn-postponed--starting up possibly this April

Club Board Meeting-2<sup>nd</sup> Friday of the month, 9 April @ 6:00 pm—via Zoom

Club General Meeting-2<sup>nd</sup> Friday of the month, 9 April @ 7:30 pm—via Zoom

### Prize Wheel

Dutch Bros. Coffee \$20 card-Jeff/KM6RGO, Wireless Mouse-Greg/KM6YKT,

Drop Power Converter-Dustin/W6YUE, Coax Crimper Tool-Greg/KO6TH. Congratulations winners!

### Tech Ten

"Remote Station Control" by Dennis/WU6X



Dennis shared with us his unique shack—a full-fledged RV! He has a remote rig configuration with compatible HF transceivers. It has Kenwood, Yaesu, ICOM, Alinco DX and Elecraft.  
Thank you, Dennis for sharing your impressive RV/Radio shack with the club!

Remote Rig Information: [http://www.remoterig.com/wp/?page\\_id=362](http://www.remoterig.com/wp/?page_id=362)

Complete Setup Info (wTS-480XS): <http://www.ky6n.com/Remotes/RRC%20Remotes/RRCremotes.html>

KASA Wireless AC power strip: <https://www.kasamart.com/us/products/smart-plugs/kasa-smart-wi-fi-power-strip-hs300>

## PROGRAM

Dr. Bob Heil/K9EID

“SCIENCE OF AUDIO...and Beyond”

Wow! All I can say is, Is there a celebrity in the house?! Our club was very honored to have the famous Bob Heil, talent extraordinaire, and most well-known for creating the template for modern rock sound systems. Bob started out playing the pipe organ professionally at a very young age, even building a pipe organ and playing at the Holiday Inn and other venues. He opened a music shop selling and renting in Marissa, Illinois. Bob created unique touring sound systems for major bands—bands like The Who, Jimmy Hendrix, the Grateful Dead, Richie Sambora of Bon Jovi--and many more. He created the “Quadrophenia” which now resides in the Rock and Roll Hall of Fame. He also designed special monitors for Billy Graham.

“Amateur Radio was my college professor”. Bob has been an innovator in the field of amateur radio, manufacturing microphones and satellite dishes for broadcasters and live sound engineers. In the late 1980’s Heil Sounds became one of the first American companies to create and install Home Theaters, and he has lectured at major electronic conventions and taught classes at various institutions. He has won multiple awards and honors, and in 2007 he was invited to exhibit at the Rock and Roll Hall of Fame, where you will find the Quadrophenia.

Paul Klipsch, “father of the folded horn”, was a great teacher, mentor, and friend of Bob’s and Paul guided Bob to the studies of the famous Bell Labs, referred to as the “Idea Factory” of the 1920’s--consolidation of America Telephone & Telegraph and Western Electric which was --the manufacturing arm of the BELL system. In the lab, 4,000 scientists and engineers were assigned to the newly created Bell Telephone Labs fully dedicated to researching how our ears work and what frequencies are most important to understand the spoken word. Maximum speech articulation is between 2kHz and 3kHz is the “spot”. This is where you want your RF and there is proof from the Fletcher/Munson Bell lab studies. Bob says, “How important is 2.5K? It’s everything!”

Bob also talked about the important of Equalization to Ham Radio and Heil iCM being commissioned by ICOM. With the Yaesu Parametric Equalizer, set the transmitter bandwidth to 200-3000. He told us to figure out how to adjust our equalizer. Dr. Bob Heil has written a number of books, including, “Practical Guide for Concert Sound” and the “Heil Ham Radio Handbook”. There is just SO much more to Bob Heil and his accomplishments and we are grateful for him taking the time to present to our club! “Hearing is a physical process. Listening is a mental process.”

Visit [www.heilsounds.com](http://www.heilsounds.com)

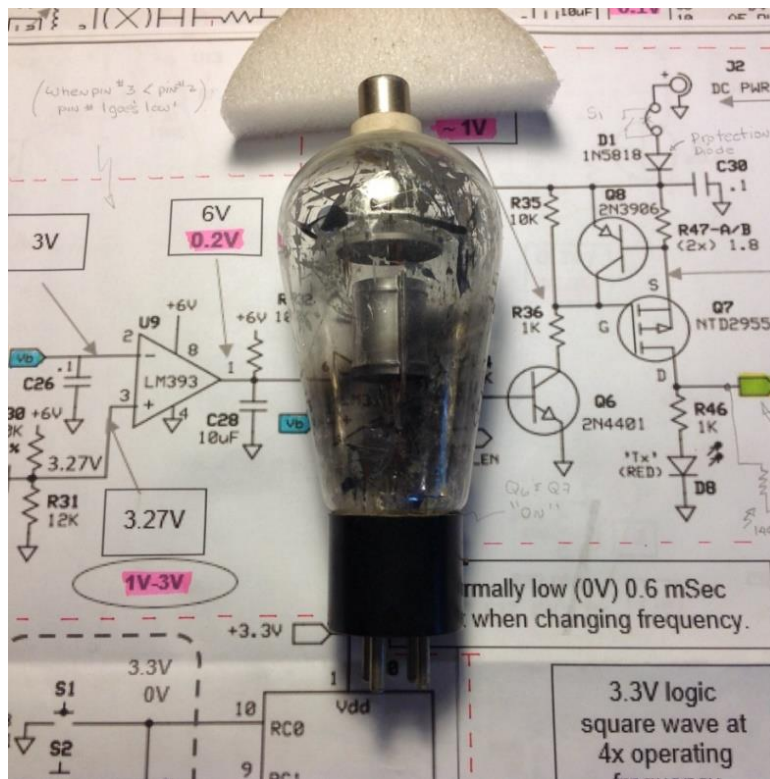
Under Support:

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Thank you, Dr. Bob Heil for joining us on Zoom (3 hours behind your time!) and inspiring us with your life's accomplishments and encouragement! And thank you for gracing us with an organ solo to top off your evening's presentation!

The meeting was adjourned at approximately 22:00. Submitted by Michele/WH7QC



**“WHAT IS IT?”**

**Answer:**

*This is a Taylor 866 Mercury Vapor Vacuum tube.*

*Bonus: It was used as a half-wave rectifier tube (usually 2 at time as a full-wave rectifier to convert AC to DC voltage -it could handle three thousand volts at half an amp!)*

**Extra Credit – Genius Level Question Answer:**

The addition of metallic mercury in the tube minimized the influence of the electrons staying near the filament thus a substantial increase in current flow with a lower voltage-drop was realized.

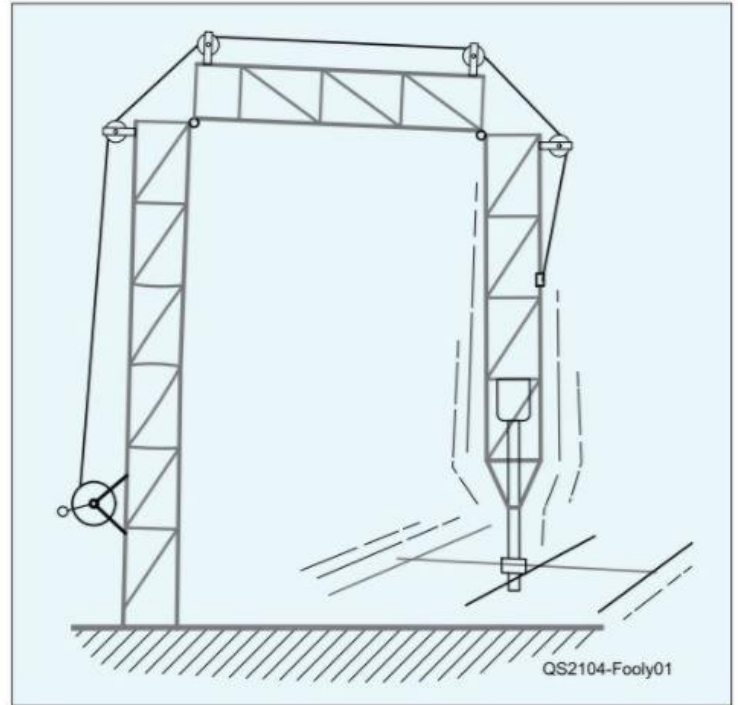
p.s. It glowed Blue - a cool look in a kids shack!

# Down-to-Earth Crank-Up Tower

The perfect crank-up tower for the grounded ham — or fans of Tetris.

## Wayne L. Hester, NK4T

I've finally designed the perfect crank-up tower! Looking at all the types of fold-over and crank-up towers, I found all these systems lacking in one important thing: They don't bring the top of the tower down low enough to install or repair beams from the ground without a ladder. At long last, I've found the solution. This down-to-Earth tower requires no ladders, cranks, or effort. While constructing your tower, simply zig it one way, zag it another, and *voila!* You've got the ideal, no-crank crank-up tower that meets you on the ground. It's perfect for me — although I admit I still need to work out a few minor kinks in the design.





**SIERRA Foothills Amateur Radio Club**

P.O. Box 6421, Auburn, CA 95604

**2021 MEMBERSHIP APPLICATION**

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_ e-mail: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Associate Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_ email: \_\_\_\_\_

Phone: \_\_\_\_\_ Cellphone: \_\_\_\_\_ Application is: (New / Renewal) \_\_\_\_\_

**Dues / Donations:**

Membership: yearly\* \$22.00 or 20x\_\_ Name Badge: \$ 10.00/15.00 Yes (special name) \_\_\_\_\_  
 Associate: yearly\* \$ 7.00 Repeater Donation: \$ \_\_\_\_\_  
 Auto Patch Donation: \$ \_\_\_\_\_ Newsletter Booster: \$ \_\_\_\_\_  
 Misc. Donation: \$ \_\_\_\_\_ Christmas Donation: \$ \_\_\_\_\_ ARRL member? (Yes/No/Life) \_\_\_\_\_

**TOTAL: \$ \_\_\_\_\_ Please add \$1 if paying via PayPal**

\*Prorated dues for NEW Members/Associates Only

July	\$ 20 /6	October	\$ 14/3 + following year	<b>New- - - New - New - Multi-year DISCOUNT Membership *\$20 per year for 2 or more years (new or renewal)</b>
August	\$ 18/5	November	\$ 12/2+ following year	
September	\$ 16/4	December	\$ 10/1 + following year	

<b>OFFICE USE ONLY:</b>	<b>DO NOT WRITE BELOW THIS LINE</b>
Date: _____	Treasurer: _____ Secretary: _____ Roster: _____
Payment: _____	Check Number: _____ Cash: _____ PayPal: _____

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