



P.O. Box 6421 Auburn, CA 95604

March 2021

<http://w6ek.org> info@w6ek.org

At The Key of SFARC:

PRESIDENT

Brian Gohl, AI6US
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VICE PRESIDENT

Greg Dolkas, KO6TH
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SECRETARY

Michele Bauer, WH7QC
mickeybauer2012@gmail.com

TREASURER

Jeff Morgan, KM6RGO
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

WEBMASTER

Herb Garcia, KM6JBI

STATION TRUSTEE

Clyde Campbell, AB4CC

VOLUNTEER EXAMINER

Andrew Silvester, K6OP

Inside this issue

- **President's Message**
- **"What is it?" question & SFARC Shoppers**
- **It's not a Begali, but...**
- **Board & General Meeting Minutes**

Calendar of Events

March 12th @

7:30pm

**Zoom General
Meeting**

March 14th

**Daylight Saving
Time**



March 17th

St. Patrick's Day



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



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

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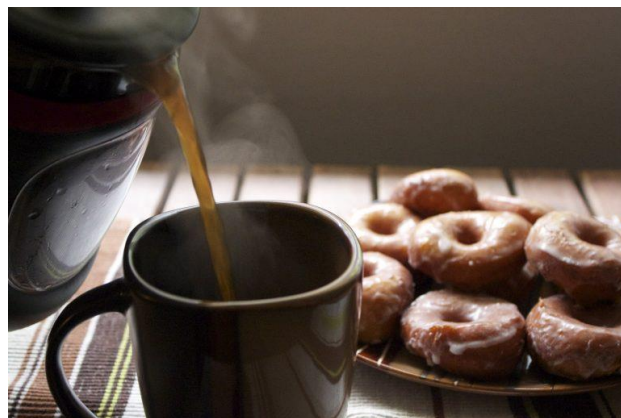


President's Message

*By Brian Gohl – AI6US,
President*

Donuts and Coffee in the Park

Mark your calendars, pack a comfortable folding chair and prep your favorite mask! SFARC will be hosting a Donuts and Coffee social distancing event at the Meadow Vista Park on Saturday, May 15th between 9 to 10:30 am. The MV park's soccer field is a large open area with plenty fresh air, sunshine and adjacent parking. The SFARC board will be serving fresh donuts and coffee, while you set-up your lawn chairs in the large grassy area and socialize with other club members. We are requesting that while you practice safe distancing procedures, most importantly, have fun!



Who knows, there might be a box or two of electronic goodies in need of being re-homed?

Need directions to Meadow Vista Park?

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

Elmer Net Changes

Carl, WF6J has announced his retirement as the Club Elmer Net Control Operator. On March 3rd, join us at 7:30pm on the W6EK 2m repeater to celebrate the hand off of the Elmer Net microphone. Erik, W6EMR will be taking over the role as net control.

Thank you Carl for your many years of mentoring new hams and running the Elmer Net!

Wind Storm Antenna Damage

Many operators in the region have reported wind damage to their stations during the recent storms. Several work parties have been organized to help members rehang wires and get their antennas back up in working order. Jim - WA8MPA experienced significant Hexbeam damage. On a recent Saturday, Richard – K6NYC, Chip KM6MDF and Josh- KK6VHH assisted in the removal and prep for a rebuild.

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

Until then, 73
Brian Gohl – AI6US
SFARC President

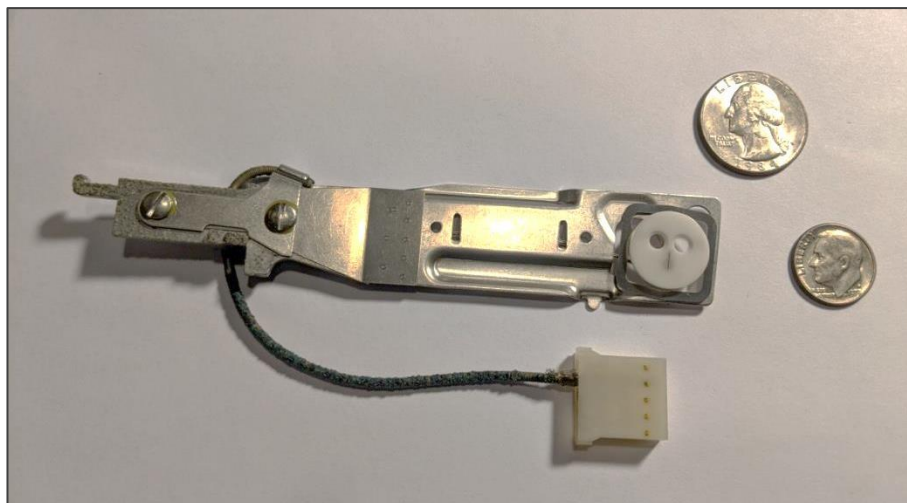
Photo: Josh, KK6VHH preps Hexbeam removal



What is it?

BONUS QUESTION: *Who manufactured the most famous versions of this gear??*

(Hint: : This is the commercial predecessor of an item probably in your shack right now)



Answer is on page 12 of this newsletter

ATTENTION!!! ATTENTION!!!

SFARC SHOPPERS



AISLE "W6EK"

All items are first come, first served. "As-is" (but checked out and good-to-go), US Dollars, pick-up at WA8MPA's.

All proceeds go to benefit SFARC activities (think Christmas Party).

THIS MONTHS BLUE LIGHT SPECIALS

Tempo 2020 HF Transceiver with Matching VFO Speaker 180 Watts 80 meters - 10 meters

~~\$150.00~~ **TODAY ONLY \$90.00**



MFJ-1762 6 Meter 3-Element Beam Antenna

150 Watts (300 Watts PEP SSB) 8.2dBi (6 foot boom)

~~\$90.00~~ **TODAY ONLY \$60.00**



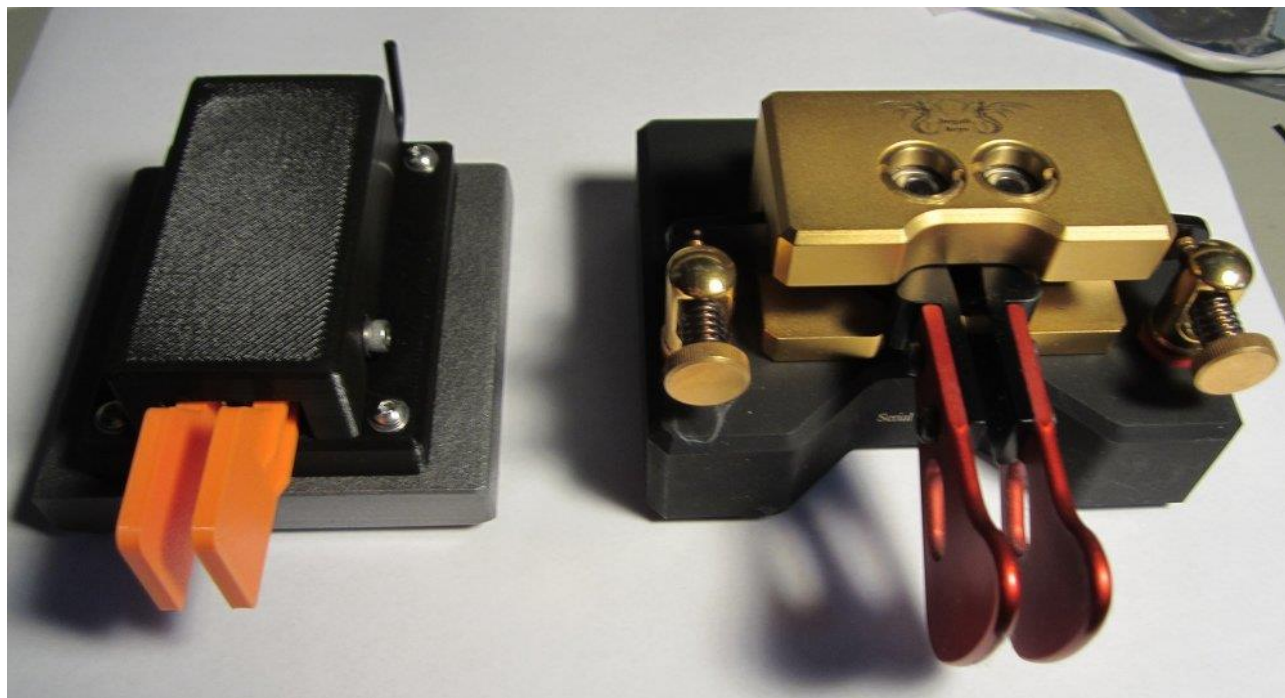
KB6NU's Ham Radio Blog

It's not a Begali, but...

By Dan Romanchik, KB6NU

One of the questions I'm most frequently asked is, "What is a good paddle for a beginner?" My usual answer to this question is to look for a used Bencher BY-1 at a hamfest or on one of the online venues. You used to be able to get them for \$60 or less. Now, however, there are few hamfests and the price has gone up. Now, used Benchers are close to \$80.

Another option that newcomers might consider is the [CW Morse](#) paddle (shown in photo below). They cost \$60 with a steel base (\$43 without), and are available from [3rd Planet Solar](#) and [Gigaparts](#). I purchased one recently, and used it for a couple of days. To be honest, I was prepared to hate it, but it actually works pretty well. It's not a Begali, but it's good enough that I'd recommend it as a starter key.



It's not a Begali Magnetic Pro (right), but the CW Morse dual-lever paddle (left) is worth considering as a first key.

These keys are mostly made from 3D-printed plastic parts. You can tell this from the finish. While not as bad as some 3D-printed parts, they do look a little rough. I wouldn't be surprised if they go to molded parts, though, at some point. In high volumes, it has to be cheaper to mold the parts rather than print them.

The key does have metal parts where it counts, though. The contacts are all brass, the base is made from 1/2-in. cold-rolled steel, and the levers pivot on sealed ball bearings. My key weighed 22.5 oz (1.4 lbs.), and was quite stationary on the silicone mat that I use for my keys. The Begali is, of course, a lot heavier at nearly 60 oz. (3.75 lbs.).

A spring between the levers provides the tension. Two screws allow you to adjust the contact spacing. Unlike the Begali, whose adjustment screws have a very fine thread to give you plenty of adjustability, these screws are standard thread screws. What this means is that it can be a bit tricky to set the contact spacing. The screws are spring-loaded to prevent the adjustment from changing, but the springs don't seem to be very beefy, and I can see where the adjustment might change after a lot of use.

The ball bearings give the key a nice action. During my tests, I had the speed cranked up to 23 wpm, and this key performed well at that speed. One thing I didn't like very much is that the arms tend to flex more than I like, but I actually have the same problem with the plastic Begali finger pieces. That's why I use the aluminum finger pieces on the Begali.

Overall, though, I'm quite happy with this key. And, for sixty bucks, which is about one-fifth of the price of a new Begali Magnetic Pro, I can certainly recommend this key to newcomers getting started in CW.

=====

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not testing new keys, he teaches online ham radio classes and likes to work special event stations and state QSO parties.



BOARD OF DIRECTORS MEETING MINUTES

Video Conference Zoom Meeting

February 12, 2021 @ 1800

Officers and Board Members present: President, Brian/AI6US, Vice-president, Greg/KO6TH, Secretary, Michele/WH7QC, Treasurer, Jeff/KM6RGO, Directors, Gerry/WA6E (phone), Wayne/W6DT (phone), and Chip/KN6MDF. Repeater (Station Trustee), Clyde/AB4CC was absent due to a ski injury and in the hospital up in Truckee.

Other members present at the Board meeting were:

Orion/AI6JB, Don/WB6LBJ, Roy/WH7DH and Jacob Bauer, Jon/KI6RT, Jim/WA8MPA, and Aaron/K6JBI.

Membership, Jeff/KM6RGO reported that the club now has about 150 members, about 15 shy of December 2020.

Treasurer, Jeff/KM6RO then gave the club budget report. The "White Elephant" sale brought in \$1,142. From the Christmas party, the club pretty much broke even this time, due to Covid.

Directors, Gerry/WA6E, Wayne/W6DT and Chip/KM6MDF had no reports at this time.

Volunteer Events Coordinator, Chip/KM6MDF reported that there is not any volunteer events right at this time due to Covid. There should be opportunities coming up towards the summer though with the Western Endurance and Tevis Cup events.

Greeters/Sunshine Boys, Roy/WH7DH and Jacob have been sending cards to members who have suffered illness or injury. The Board voted unanimously that Jacob receive a “Sunshine badge” to wear for his club calling.

Newsletter, Barbara/W6EVA does a tremendous job! She had lots of good articles. Let’s keep it up! Barbara has encouraged members to contribute articles, technology, outings, installs, etc. for our newsletter. These will help to make our newsletters even more interesting, informative, and entertaining.

Brian will “hide Easter eggs” in the April newsletter. A random responder winner will be chosen. What a fun idea!

Webmaster, Herb/KM6JBI has requested pictures for our club website. These too, always help our website to be even more interesting and fun!

Groups io: Dennis/WU6X reported that on the Groups io site we have had lots of items on there from Instant Pots to Air Fryers. We learned that Instant Pot has an Air Fryer attachment—just saying....

Social Media, Orion/AI6JB volunteered as a temp Chair. Thank YOU, Orion!

Contest Chair, Dennis/WU6X reported that the CQ Worldwide RTTY is coming up.

Drawing Chair, Aaron/K6JBI had no report.

Snack Bar—Snacks are BYOS at the Zoom meetings. 😊

Public Information Officer (PIO), Scott/WA6YNE was not present.

Field Day—We need volunteers. Let’s plan for it, as we can always cancel later. It is much better to be prepared! We still need to allow for social distancing. A poll will be sent out to club members for their input regarding Field Day being held in person or at home.

Nomination Chair—TBD

Christmas party 2021-TBD

Picnic Chairs, Roy/WH7DH and Michele/WH7QC will keep in touch with Auburn Parks and Recreation folks to arrange the venue. The date will be: The third Saturday in September—September 18, 2021.

Repeater Lease

Sister ARC Proposal-Gerry/WA6E moved to table it for now and Wayne/W6DT seconded it. It was a proposal by Ken/K6KEC

Financial Review-Don/WB6LPJ chaired with Marv/N7MSM assisting. Don praised Jeff and his great job as our club treasurer. Thank you, Jeff, for all your time and efforts on behalf of the club! Thank you, Don and Marv for your help with the financial review. Next year, Marv/N7MSM will be the financial review chair.

New Business

Brian/AI6US proposed that the club sponsor a “coffee and donuts” morning in the park for interested club members. Everyone must bring their own chairs. We will plan to meet at the Meadow Vista Park in Meadow Vista, possibly on Saturday, May 15 around 8/9:00 AM. We will practice the necessary social distancing. We will budget \$100 for this low-key event. This should be a great way for club members to reconnect personally once again after the nearly one year of being apart for the most part. Great idea, Brian! Gerry/WA6E motioned and Jeff/KM6RGO seconded for the club to allow \$100 for the “Coffee and Donuts in the Park”.

Regional VE Group: We now have 10 VE's. We have the opportunity to partner up with the Regional El Dorado Club. The Regional VEC Coordinator is Tony/W6QA. He suggested we invest in “Fire Tablets.” There is a computerized exam format which eliminates handling of papers and transparencies. The tablets are used in lieu of paper/pen and is electronic which saves time and mailing as it is all computerized. There are 5 clubs represented in this region. We have been doing it with Portland. We will keep our local identity and our club has a VE committee.

Questions: Who is administering? What is the cost for “Fire Tablets”?

The club's consensus is to move forward with the electronic ways of doing things. There will be a financial cost which will be looked into. There was a vote to join with El Dorado, where Tony/W6QA is the VEC Coordinator. It was unanimous to explore into this partnership with the VE Electronic Processes.

Radio Direction Finding Project (Fox Hunt) will be Saturday, February 13, 2021.

Jim/WA8MPA mentioned that in this month's QST, there is an excellent article on Licensing (p. 64).

The Board Meeting adjourned at 19:16 with the Club General Meeting following soon afterwards.
Submitted by Michele Bauer/WH7QC



GENERAL MEETING MINUTES

Video Conference Zoom Meeting

February 12, 2021 @ 2008

President, Brian/AI6US greeting and welcomed all as they linked in with our monthly zoom meeting. The “chat auction” has been a great feature of the zoom meetings. Jim/WA8MPA introduced each item to be auctioned:

Benchner YA-1 Low Pass Filter, Magnum Linear 2000-10M Amp, MFJ 4225 MV Switching Power Supply, and B&K Model 3050 Audio Generator.

Most officers were present: President, Brian/AI6US, Vice-president, Greg/KO6TH, Secretary, Michele/WH7QC, Treasurer, Jeff/KM6RGO, Directors, Gerry/WA6E (phone-in from Quartzite), Wayne/W6DT, and Chip/KM6MDF. Repeater Trustee, Clyde/AB4CC was absent due to a serious skiing injury. He is in our thoughts and prayers.

Newbies on our zoom meeting were introduced:

Jerry/KN6MOL and wife/KN6MOK, Dan/K6JBA (new Ham & club), Tim/KD6HOF, Greg/KM6YKT, Guy/W6GUY, Dan/K6DLK, and Joshua Morris (no sign yet, but working towards his Tech). Welcome all!

The meeting was called to order with the Pledge of Allegiance led by Brian.

Greg/KO6TH announced about the great presentations planned for the evening—our usual “show us your shack” and a special one by Joe/K6SAT.

Michele/WH7QC had no secretary report.

Jeff/KM6RGO gave us his treasurer’s report. The annual Christmas party we broke even, with the White Elephant sale helped us in our Christmas party, making great prizes possible.

Directors, Gerry/WA6E, Wayne/W6DT and Chip/KM6MDF had no reports.

Special Events Coordinator, Chip/KM6MDF announced the upcoming Western States Endurance Run and Tevis Cup, both occurring in the summer.

The January 2021 minutes were accepted as submitted.

Field Day: A poll regarding Field Day will be sent out to club members for their input about whether to meet in person or not.

“Coffee and Donuts Saturday” is being proposed by Brian as a much needed in-person social for the club. The proposed date is Saturday, May 15 at 9 am at the Meadow Vista Park. Everyone is encouraged to bring their own lawn chairs. There will be social distancing of course.

Brian/AI6US proposed, and the Board voted unanimously to merge with the Regional El Dorado VE Online Group of which Tony/W6QA is the VEC. Going virtual is the way to go these days plus it saves time and mailing.

The annual financial review was done by Don/WB6LBJ and Marv/N7MSM with Jeff/KM6RGO. As expected, the books were found in good order, thanks to our wonderful treasurer, Jeff! Thank you, Don, Marv and Jeff for a job well done! Don is passing the audit baton over to Marv/N7MSM for next year.

The club held a “vote by voice” on the five new SFARC members. Roy/WH7DH motioned and Carl/N6DKV seconded the motion to vote on the new members. The voting was unanimous. New members are:

Brian, Paul, Charlie, Debbie, and Daniel. Welcome new members!

“Wheel of Prizes” for the meeting was run by Dennis/WU6X. Items to win: Tiny SA Spectrum Analyzer, Uline Toolbox Step, and a Tablet Soft Case.

TECH TEN

“Show Us Your Shack” featured Brian/AI6US’s very neat, tidy, impressive ham shack. He has a nice wire rack, which sits neatly in one corner, in which he can plainly see his various radios, amplifiers, etc. without having to move away from his desk. Great shack Brian! Thank you for sharing!

PROGRAM

“Ultimate DX”

by Joe Steinmetz/K6SAT

Joe/K6SAT is an engineer with an MS in both Computer Engineering and Space Communication. His interests are in Satellite and Spacecraft Communications, tracking, control and decoding hardware and software and is an experienced endurance runner and mountain climber.

What is Amateur DSN? DSN is a NASA acronym for “Deep Space Network”. It is a “World-wide network of US spacecraft communication facilities, located in US, Spain and Australia, that supports NASA’s interplanetary spacecraft missions.” The European equivalent is called ESA. It uses 2.2 GHz, 8.4 GHz, 26.5 GHz and 32 GHz.

Among other things Joe talked about are: The Doppler radar sends the energy in pulses and listens for any returned signal. The phase shift effect is similar to the “Doppler shift” observed with sound waves. The first space Probe was detected in 1998. Rubidium and cesium atomic clocks are used on the ground, there are no atomic clocks on interplanetary spacecraft, and precise timing is needed for ranging, doppler corrections and navigation.

Joe talked about “What’s happening at Mars this month?” The orbiter, EMM “Hope” arrived on February 19, Tianwen-1 “Questions to Heaven” arrived on February 10 (Orbiter, Lander, Rover), and on February 18 the Mars2020 “Perseverance and Ingenuity” is due (Lander, Rover, Helicopter). So, very exciting things are occurring with regards to space.

Some great quotes he shared:

“You’ve got to be very careful if you don’t know where you are going because you might not get there” (Yogi Berra). ☺

“There is beauty in space, it is orderly. There is no weather, and there is regularity. It is predictable. Just look at our little Explorer; you can set your clock by it. Everything in space obeys the laws of physics. If you know these laws, and obey them, space will treat you kindly” (Wernher von Braun).

Joe is one of only about five internationally, that actively and everyday monitor-space-using very sophisticated and intricate astronomy equipment! Thank you, Joe for such a fascinating and well-done presentation! How wonderful to have such an accomplished astronomer “in the clubhouse”!

Committee Chair Reports

Repeater Trustee, Clyde/AB4CC is in the hospital, but the repeaters are up and running. Please keep Clyde in your thoughts and prayers!

Greeter/Sunshine, Roy/WH7QC and Sidekick Jacob have been sending out cards to various members on behalf of the club.

VE Exams: We will start working with the area online.

ARES, Carl/N6CKV reported that ARES net is every Sunday evening at 7:30 pm on the W6EK repeater.

Volunteer Events, Chip/KM6MDF reported that the annual Western States Endurance Run and Tevis Cup events are in the planning for this summer. The training runs will be on a different route to avoid parks.

A new Tech class is coming up on May 4 via zoom plus a few labs--taught by Orion/AI6JB. There will be 12 slots. Orion is currently teaching the Extra class with 13 students. Thank you, Orion, for all your tireless efforts in growing the Amateur Radio family!

Newsletter, Barbara/W6EVA does an absolutely, terrific job! There was a great article by Josh/KK6VHH. Thanks Josh! Barbara would love many more articles, outings, technology, pictures and so forth for the monthly newsletter.

Satellite, Greg/KO6TH reported a bit on the "Space Daily."

Groups io, Dennis/WU6X reported that there is lots of information and you do not need to be a club member to access it.

Contest Chair, Dennis/WU6X reported that the CQ Worldwide RTTY is in the planning.

Social Media, Orion/AI6US has just volunteered to do the job as Bob/K6UDA has moved to Idaho. THANK YOU, Orion! You do so much for the club!

Membership, Jeff/KM6RGO reported that we have 150 members in the club; however, there may be a few more memberships in the mail.

Equipment Donations/Library, Jim/WA8MPA reported that we have several DVD's of past QST editions that have been donated to the club.

He also said that there were no "chat auction" offers for tonight's items so we will postpone the auction for our March meeting.

Announcements

Club Nets-Every Thursday evenings at 7:30 pm (145.430, PL=162.2)

Elmer Net-Every 1st and 3rd Wednesday evenings @ 7:30 pm (145.430, PL=162.2).

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

Club Breakfast-Last Saturday of each month @ Mel's Diner in Auburn-POSTPONED until further notice.

Club Board Meeting-2nd Friday of each month-next one being March 12, 2021 @ 6:00 pm via Zoom.

Club General Meeting-2nd Friday of each month-next one being March 12, 2021 @ 7:30 pm via Zoom.

Prize Wheel

Tablet Soft Case>>Justin/N6FWD

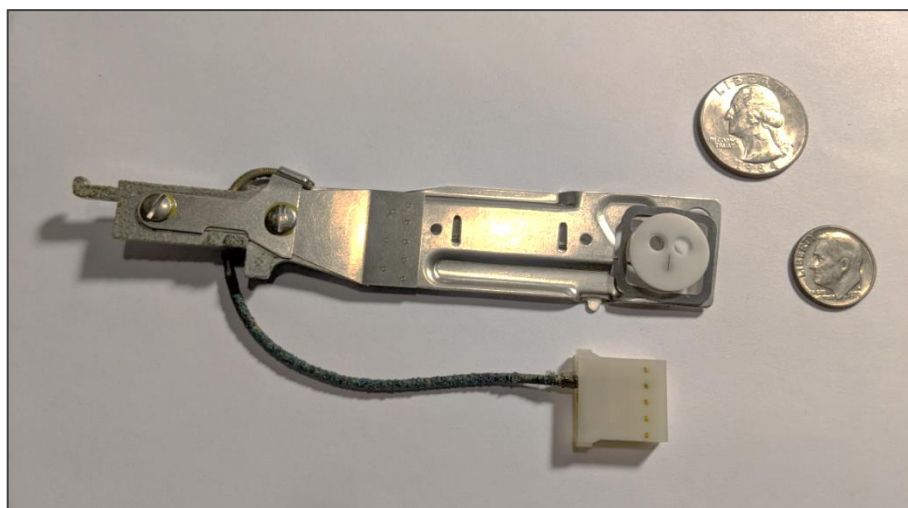
Uline Toolbox Step>>Shannon/K6TNY

Tiny SA Spectrum Analyzer>>Adam/KM6MPM

Congratulations winners on your great prize takeaways! Thank you, Dennis for doing a great job with the Prize Wheel!

Any QST's from the Members?

The General Meeting adjourned at 22:03. The Zoom link was left open for socializing.
Submitted by Michele J. Bauer/WH7QC



“WHAT IS IT?”

Answer:

Back before IBM developed the "Winchester" disk drive, hard disks used a rather large circular "head" with a magnetic coil (the thin line in the middle) embedded below its ultra-smooth surface. The shape, including the holes, was designed to prevent any contact between the head and the magnetic surface over which it flew. Any such contact, called a "head crash", would contaminate the surface of the head, and damage the media's magnetic coating, leading to bad spots and lost data. The contamination would disturb the air flow over its surface, quickly lead to further contact events, rapidly destroying the disk platter and read/write head. Replacing disk heads (and media!) was unfortunately a frequent event. This head was from one such replacement.

Bonus Question Answer:

IBM's breakthrough was to shrink the head and make the disk media able to withstand the head not only touch the disk surface without damage, but actually take off and land on it as the disk spun up and down.

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
August	\$ 18/5	November	\$ 12/2+ following year
September	\$ 16/4	December	\$ 10/1 + following year

New - - New - New -
Multi-year DISCOUNT Membership
***\$20 per year for 2 or more years (new or renewal)**

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Date: _____ Treasurer: _____ Secretary: _____ Roster: _____

Payment: _____ Check Number: _____ Cash: _____ PayPal: _____

Rev. 5-11-2018



Dennis H. Gregory
Instructor/Technician

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