SCCARA-GRAM



Santa Clara County Amateur Radio Association

Volume 46, Number 9

September 2021



2021 – Our 100th Year!

Meetings & Gatherings

Our in-person meetings are still canceled due to the Covid-19 pandemic. The board meeting will be held verbally at the normal day and time on our 2 m repeater immediately following the Monday night net. The club station is open, usually the last Saturday of the month from 10 am to 4 pm. Masks and social distancing are required. No electronic flea markets either.

Progress report: Due to the more infectious Delta strain, new case are up to 28 per 100,000 in California (12 last month) mainly among the unvaccinated. Statewide 66% are fully vaccinated (62% last month); in Santa



Clara County 81% are fully vaccinated (78% last month).

Repeater Backup

Our 2 m repeater is managed and maintained by Goetz K6GKB. He recently did a battery backup test. There was no noticeable voltage drop after running the repeater for 24 hours on batteries.

The 2 m repeater draws 1.6 amps during receive, 8.3 amps during transmit. And it has EchoLink, which draws 0.8 amps. That's a total of: 2.4 amps RX, 9.1 amps TX.

The backup consists of six lead-acid batteries with a total capacity of 1060 amp-hours (AH). In practice they would not be useable near the end of that capacity.

If it transmitted for an average of one hour per day, that would be 64.3 AH each day. So <u>the backup batteries have</u> <u>enough capacity for one or two weeks</u>, depending on usage.

Even if it transmitted constantly (theoretical worst case), that would be 218 AH per day. The batteries would last four days.

73, Gary WB6YRU

Reflections

I thought I might reflect on an episode in my life that included ham radio. Toward the end of my career I had the good

Calendar

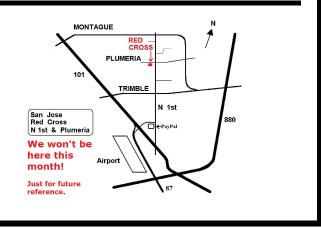
9/13SCCARA General Meeting -- canceled9/20SCCARA Board Meeting: On our 2 mrepeater after the net at 7:30 PM)

General Meeting

Day: <u>Time:</u> <u>Place:</u> Featuring:

Monday, Sept. 13-- Canceled

Homestead Rd We'll meet in awrence oom B-06, in the basement of the hospital building. The Expressway cafeteria is just to the west. We won't be here this month This map is just for future reference. ñ Kaiser Santa Clara Santa Clara



The *SCCARA-GRAM* is published monthly by the **SANTA CLARA COUNTY AMATEUR RADIO ASSOCIATION**, PO Box 106, San Jose CA 95103-0106.

SCCARA was formed in 1921 and became a non-profit corporation in 1947. SCCARA is an affiliate of the American Radio Relay League (ARRL). The club station is W6UW.

Permission to reprint articles is hereby granted, provided the source is properly credited.

The deadline for articles is the last Monday of the month.

SCCARA web page https://www.qsl.net/sccara club email: w6uw@arrl.net or w6uw@sbcglobal.net

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SCCARA REPEATERS

 SCCARA owns and operates two repeaters under the call W6UU:

 2 meter:
 146.985

 70 cm:
 442.425 +

 PL 107.2

Phone auto-dial and auto-patch is available. The two meter repeater is located at Eagle Rock near Alum Rock Park in the foothills of east San Jose. The 70 cm repeater is located at the Regional Medical Center (formerly Alexian), east of downtown San Jose, north of 280 and 101.

SCCARA NETS

On our two meter repeater: Mondays at 7:30 PM, (not the second Monday--our meeting night). Coordinator: Don Village, K6PBQ. On ten meters, 28.385 MHz USB, Thursdays at 8:00 PM. Net control: Wally Britten, KA6YMD. Visitors welcome.

NØARY PACKET BBS

SCCARA hosts the packet BBS NØARY (connect to n0ary-1). User ports: 145.09 MHz at 1200 baud, 433.37 MHz at 9600 baud, and telnet sun.n0ary.org (login "bbs"). Sysop: Gary Mitchell, WB6YRU For general packet info, see the NCPA web site ncpa.n0ary.org.

AMATEUR LICENSE TESTING

ARRL/VEC Silicon Valley VE group: Morris Jones, AD6ZH: 408-507-4698 fortune of being granted the rights to the software that I had been maintaining for clients and whose numbers had dwindled to twelve. Not a big enough number for my employer, but huge when the clients where turned over to me. And so it was that my remaining years as a mentor to these companies netted me what was truly a grand sum of money. One of my last assignments sent me to Florida, specifically Orlando where I worked for roughly two years. The beauty of this assignment was that I was given a rental car, all meals and lodging as part of the remuneration. The rental cars had unlimited mileage, the meals were wherever I wanted to eat, and the Hotel was a gorgeous suite, actually two separate complete apartments. This company had a policy of working 10 hour days and giving every second Friday off resulting in alternate three day weekends. I managed under these conditions to visit almost every corner of Florida from the Keys to the Panhandle and beyond. Truly a beautiful state, albeit the highest ground in the state is 345 feet!

Oh yes, ham radio. Well, I had my trusty ICOM IC-706 MKIIG along and installed in the rental cars with a Hustler antenna. All provided by AES who had a store in Orlando. Florida has a law that says cars can only be rented for a maximum of four weeks, no longer. And so it was that the mobile installation had to be removed and reinstalled over and over again. With this I kept my slot in our afternoon 20 meter net that included Canada, California, Washington, Utah and several other states. Can't tell you how well this worked. With more money flooding in than I knew what to do with, I became an EBAY junky. And I always scanned anything from ICOM. Too my surprise a 4KL amplifier became available and in a nearby Florida City. Never mind that I already had one of these glorious amplifiers, I envisioned a backup station and just had to have this piece of equipment. A phone call and the seller invited me to come over. Imagine my surprise when it was a gated community which contained behemoth seven/eight story tower apartments. After I announced my intentions to the gate guard I was directed to one on the towers where once again a doorman challenged my entry. I was quickly told to use the elevator, my party was on the top floor. Up I went and when exiting the elevator I was in a pent house. My contact owned the whole top floor which he was very proud to guide me through and we ended up in his shack which was an enormous room devoted to this purpose. He explained that he was able to interrupt the construction of the building and have some engineering changes incorporated which included an extra robust power distribution panel, bus bars as well as an enormous conduit that were installed between his radio room and the roof of the building. This conduit was now stuffed with coaxial cables. He took me up to the roof and showed me the copper strapping that was installed everywhere to his specifications and the enormous tower with his beam atop. Turns out the tower had to be lifted up with the crane that was used to construct the building! It didn't take long to realize that this guy made slightly more money than I did. So I questioned him as to his occupation and it turned out he was a principle in an electronics startup that made it big time. In fact, this apartment was one of three he owned, another in California and I forget where the third one was. Lovely what money can do and especially when wisely dispensed. So I took my amplifier and left.

The story does not end here. My stay in Florida was actually a non contiguous two years, so I was able to attend three HamCations, Florida's and one of the USA's largest ham conventions. Acres and acres of outdoor vendors, several large indoor salons and attendees to numerous to count. Imagine my surprise when I come to a table in one of the buildings sponsored by my 4KL supplier. But there was nothing on the table! The chair behind the table empty! Next year the same thing, however his wife was occasionally sitting in the chair looking a bit bored. Took me the third year to figure it all out. The HamCation allows vendors to arrive two days before the official opening. My 4KL provider pays for a single table and becomes a vendor. This allows him entry two days before the masses arrive. This gives him time to see the entire flee market by himself. He has access to all the

commercial vendors, one on one without any jostling for position. My guess is that if you go to the next HamCation there will be an empty table with a single business card in the middle to let you know he is somewhere on the premises.

Goetz Brandt, K6GKB

Op-Ed

Has SCCARA Caught Covid-19?

A club member recently told me that because of the pandemic, the lack of face-to-face meetings made it seem like SCCARA isn't real, that it doesn't exist any more, or at best it's in deep hibernation.

Well, please consider this: Does the ARRL seem real, does it exist? Certainly! Are they in hibernation? Certainly not! But I've never been to a face-to-face ARRL meeting, have you? The closest I've come are sessions at Pacificon where our ARRL Pacific Division Director would say a few words, but I don't believe that counts as an ARRL meeting.

In comparison SCCARA may be just a small local club, but like the ARRL, the current lack of face-to-face meetings doesn't make us any less real. We've still got our newsletter, published on a regular basis. The membership is still here, our club station is still here (and is open again), our web site is still here, our repeaters and packet BBS are still here. We hold regular board meetings verbally on our 2 m repeater, in addition to the regular nets. Our repeater has EchoLink for those far away. That sounds to me like a real club!

Or how about this: Amateur radio is a hobby where we communicate without seeing each other (except maybe ATV). Does that make the person at the other end seem like they aren't real?

As editor I may be biased, but I think it might help if the SCCARA-GRAM got more material from the membership. Let us know what you've been up to... Any projects? Any questions? Any thoughts on something radio related? Many of you are willing to take the time to attend a meeting each month. Since that's out, why not spend a few of those minutes putting something together for us right here? Whatever you'd like to say at a meeting is OK for the newsletter.

73, Gary, Editor

ARRL News

From The ARRL Letter, July 29, 2021

8 m Experimental Station on the Air from the US

WL2XUP is an FCC Part 5 Experimental station operated by Lin Holcomb, NI4Y, in Georgia. It's licensed to operate with up to 400 W effective radiated power (ERP) between 40.660 MHz to 40.700 MHz.

John Desmond, EI7GL, reports that as of mid-July, WL2XUP was intermittently transmitting on Weak-Signal Propagation Reporter (WSPR) on 40.662 MHz (1500 Hz) for 2 minutes out of every 10, with an output power of 20 W ERP into an omnidirectional antenna. For FT8 check-ins and tests, an ERP of 100 W may be used. The band is affected by several propagation modes, including tropospheric ducting, sporadic E, transequatorial propagation (TEP), and F2 propagation. As Desmond notes, the 40 MHz band will open a lot earlier than 50 MHz and could be a useful resource for stations monitoring the transatlantic path.

A 2019 Petition for Rulemaking (<u>RM-11843</u>, <u>https://tinyurl.com/y57f4h54</u>) asked the FCC to create a new 8-meter amateur radio allocation on a secondary basis. The Petition suggests the new band could be centered on an industrial-scientific-medical (ISM) segment somewhere between 40.51 and 40.70 MHz. The spectrum between 40 and 41 MHz is currently allocated to the federal government and, as such, within the purview of the National Telecommunications and Information Administration (NTIA, https://www.ntia.doc.gov/).

ARRL member Michelle Bradley, KU3N, of Maryland, filed the petition on behalf of REC Networks, which she founded and described in the Petition as "a leading advocate for a citizen's access to spectrum," including amateur radio spectrum.

From The ARRL Letter, August 5, 2021

ARRL Now Provides Free RF Exposure Calculator

The FCC has adopted guidelines and procedures for evaluating environmental effects of RF emissions.

Under the new FCC rules, some amateurs need to perform routine station evaluations to ensure that their stations comply with the RF exposure rules. This can be as simple as running an online calculator to determine the minimum safe distance between any part of your antenna and areas where people might be exposed to RF energy from your station. Although amateurs can make measurements of their stations, evaluations can also be done by calculation.

The FCC guidelines already incorporate two tiers of exposure limits based on whether exposure occurs in an occupational or "controlled" situation, or whether the general population is exposed or exposure is in an "uncontrolled" situation.

To make this easy for amateurs, ARRL now provides an $\frac{\text{RF}}{\text{exposure calculator}}$ on its RF Exposure page. To use the calculator, enter your transmit peak-envelope power (PEP) and operating mode, and answer the questions about the maximum amount of time you might be transmitting. The calculator will give you the minimum distance people must be from your antenna and human exposure. (http://arrl.org/rf-exposure-calculator)

You can print the results and keep them in your station records. There is no requirement to send your results to the FCC.

From The ARRL Letter, August 19, 2021

FCC Application Fees Unlikely to Go into Effect Until 2022

The previously announced schedule of FCC amateur radio application fees likely will not go into effect before 2022. FCC staff confirmed during a recent virtual meeting with Volunteer Examiner Coordinators (VECs) that the agency is still working on the necessary changes to the Universal Licensing System (ULS) software and other processes and procedures that must be in place before it starts collecting fees from amateur applicants. Earlier this year, the FCC said it would not start collecting fees from amateur applicants before this summer. The new estimate is that the fees won't go into effect until early next year. Once it's effective, a \$35 application fee will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. Administrative update applications, such as those to change a licensee's name, mailing, or email address, will be exempt from fees. ARRL VEC Manager Maria Somma, AB1FM, said Volunteer Examiner (VE) teams will not face the burden of collecting the \$35 fee.

"Once the FCC application fee takes effect, new and upgrade applicants will pay the exam session fee to the VE team as usual, but they'll pay the \$35 application fee directly to the FCC using the FCC Pay Fees system," she explained. 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 days from the date of the email to pay. (https://apps2.fcc.gov/Batch Filer/login.cfm)

After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days. Licensees also will be able to view, download, and print official license copies by logging into their FCC ULS account. The FCC no longer provides printed licenses.

Licensees can log into the <u>ULS</u> with their 10-digit FRN (FCC Registration Number) and password at any time to view and manage their license and application, print their license, and update anything in their FCC license record, including adding an email address. (https://www.fcc.gov/wireless/universal-licensing-system)

SAQ Reports "an Incredible Number" of Listeners for July 4 Transmissions



The Alexander Grimeton Friendship Association reports "an incredible number" of <u>listener reports</u> -- 524 in all -for its July 4 Alexanderson Day transmissions from SAQ, the Alexanderson alternator very-low-frequency (VLF) station in Sweden. SAQ transmits on 17.2 kHz.

(https://alexander.n.se/wp-content/uploads/2021/08/Alexanderso n-Day-2021-Summary-Report-20210812.pdf)

"We are overwhelmed by all the fantastic feedback we have received, from all of you around the world, in listener's reports and on <u>our YouTube channel</u>," the association said.

(https://alexander.us1.list-manage.com/track/click?u=521e9c513 18e4c7f70e1e6b56&id=ac7aea772b&e=557352808d)



"The weather on Alexanderson Day was sunny, with temperatures around 25 °C. Some approaching thunderstorms could be seen on the horizon," the report said. "For the first time since the pandemic started, we were able to have a limited, seated audience in the transmitter hall -- fantastic! The Alexander Grimeton

Friendship Association managed to carry out two successful

transmissions to the world from the old Alexanderson alternator SAQ."

The first transmission was initiated at 0830 UTC, with the startup and tuning of the Alexanderson alternator. The message was sent out a half-hour later, and the transmission event was livestreamed via YouTube. A second transmission was made at 1200 UTC.

Amateur station SK6SAQ, which operates from the SAQ site, was on the air for Alexanderson Day. "On Alexanderson Day, HF conditions were not optimal, but the radio amateurs reached 169 QSOs with 21 countries, mostly in Europe and a few from the US," the report continued. "Two stations were in operation, with both SSB and CW."

The Alexanderson alternator is an electro-mechanical radio transmitter that dates to the 1920s.



Jay Rusgrove, W1VD, in Burlington, Connecticut, was among the US listeners who submitted a report. "The first transmission was a washout due to high QRN," he recounted. "The second transmission had somewhat lower QRN levels. Reception was not as good as some years' summer transmissions, which turn out to be unexpectedly good."

Rusgrove posted <u>a brief audio file</u> from the second transmission tune-up and message transmission. Listen closely for the clean CW signal beneath the noise.

(http://www.w1vd.com/SAQ070421.mp3)

Sailing Vessel with Ham Radio History Marks 100 Years

The schooner <u>Bowdoin</u> is a century old this year. Now owned by the Maine Maritime Academy (<u>MMA</u>) as a training vessel, the ham radio history of the 88-foot (LOA) Bowdoin is often neglected. Constructed in Maine specifically



for Arctic exploration, the vessel relied on amateur radio for communication during explorer Donald B. MacMillan's Arctic Expedition of 1923 and on the MacMillan-McDonald-Byrd Expedition of 1925 -- thanks in part to ARRL co-founder Hiram Percy Maxim, W1AW. The venerable vessel, the official vessel of the State of Maine and the <u>flagship</u> of Maine Maritime Academy's Vessel Operations and Technology Program, recently underwent a complete hull restoration and refitting and has done a little touring to mark its centenary. Its home port is Castine, Maine. <u>https://www.bowdoin.edu/arctic-museum/educational-resources/</u> schooner-bowdoin.html

https://mainemaritime.edu/

http://mainemaritime.edu/waterfront/schooner-bowdoin/

The longwave transmitters MacMillan used on his earlier missions had proved "unable to penetrate the screen of the aurora borealis," ARRL historian Michael Marinaro, WN1M, explained in his article, "Polar Exploration," in the June 2014 issue of QST. In 1923, MacMillan turned to ARRL for help in outfitting his next expedition with better wireless gear. Marinaro recounted, "It was enthusiastically provided." Maxim and the ARRL Board recruited Donald H. Mix, 1TS, of Bristol, Connecticut, to accompany the crew as its radio operator.



ON BOARD THE "BOWDOIN," AFTER UNPACKING THE EQUIPMENT from a mountainess pile of packing cases, Left to right, F. H. Schnell, A.R.R.L. Tradic Manager; D. H. Mis, WNP's operator; K. B. Warner, Editor of "QST"; M. U. West, Zonth engineer who designed the installation; and Dr. MacMillan, the "Bowdoin's" shipper.

M.B. West, an ARRL Board member, designed the gear, which was then built by amateurs at his firm, Zenith Electronics. The transmitter operated on the medium-wave bands of 185, 220, and 300 meters, running 100 W to a pair of Western Electric "G" tubes. Earlier exploratory missions had used gear that operated on longwave frequencies. The shipboard station on board the Bowdoin was given the call sign WNP -- Wireless North Pole.

"WNP transmitted weekly 500-word press releases and listings of stations worked and heard," Marinaro said. "Once received by amateur stations, these reports were delivered to local affiliated newspapers of the North American Newspaper Alliance; from there, they were distributed syndicate-wide by telegraph."

MacMillan's subsequent attempt at the North Pole centered around wireless. The objectives supported by the Navy and the National Geographic Society were to determine the full capabilities of radio north of the auroral belt and to explore the northern reaches by air. The outstanding accomplishment of the 1925 expedition was in the sphere of radio. Utilizing shortwave, the expedition was in consistent contact with the outside world throughout the journey, to the delight of the amateurs who were able to work them. The phenomenal success proved to the Navy that shortwaves were definitely superior to the longwave and ultra longwave that fleets had been using.

{I believe they meant very longwave, instead of ultra longwave. LF is 30 to 300 kHz, VLF is 3 to 30 kHz, and ULF is 300 to 3000 Hz which is audio frequencies. -- Editor}



General Meeting, Aug. 9, 2021



{meeting was canceled}

Board Meeting, Aug. 16, 2021



Held verbally on our 2 m repeater W6UW/R

Meeting called to order by President Gregg Lane KF6FNA at 7:38 PM (PDT)

Attendance: President Gregg Lane KF6FNA; Treasurer Goetz Brandt K6GKB; Station Trustee Don Village K6PBQ; Director Lou Steirer WA6QYS; Director Wally Britten KA6YMD. Unexcused Absence: VP Ned Tufekcic AC6YY; Director Ben Shuford KK6CCU; Director James Rustemier KI6ZSK. Excused absence: Secretary Truman Lindsey N6TRU, Director John Parks W6JPP. Visitors: Editor Gary Mitchell WB6YRU, Gwen KF6OTD

President's Report, Gregg KF6FNA: Nothing new

Secretary's Report, Gregg KF6FNA: The previous board meeting minutes were published in the SCCARA-GRAM. No corrections. Approved by acclamation.

Treasurer's Report, Goetz K6GKB: checking = \$ 11178.50, cash = \$216.04, Total = \$11394.54

Trustee's Report, Don K6PBQ: Club station will be open Saturday, Aug. 28, 10 am to 4 pm.

Standing Committees

Editor's report: Gary WB6YRU: Nothing new with the newsletter. But I have a question for the board: What would make you more likely to contribute articles? I had a new column that I thought would help (What do you like about amateur radio), and there were a couple of articles at first, but it didn't last. Perhaps something else? What would people like? (no comments heard)

BBS Sysop's report: Gary WB6YRU: Nothing new to report, it's running fine.

Repeater chairman's report, Wally KA6YMD: Nothing new with the 2 m repeater. In the last minutes it was noted I reset the repeater, that was the 70 cm repeater. It stopped responding, cycling the power cured the issue.

Gregg KF6FNA: This Saturday RACES will use the repeater 10 am to 12 noon.

Goetz K6GKB: I serviced the batteries (there's a lot of capacity), they're in good shape.

Paul KK6HWN: Since RACES is doing a drill, maybe it would be a good idea to pull the plug and let the batteries take over, make sure backup power works OK.

Goetz KF6FNA: I'll do that Saturday morning.

Webmaster's report, Wally KA6YMD: No significant changes.

Old Business:

Gregg KF6FNA: The antennas on the Red Cross were changed, still a work-in-progress.

Gregg KF6FNA: Some members want to use the repeater using the club call sign. SCCARA special event to be run out of their own house.

Don K6PBQ: We can't operate at the Red Cross, the 2 m radio there isn't ours. This would be on simplex, at home, not at the club station. Info should be put in the newletter.

Gregg KF6FNA: Antenna trailer get-together hosted by John W6JPP is on hold for now. And the possible radio camp-out is also on hold for now.

New Business:

KF6FNA: About possibly having meetings again. Because of social distancing requirements, based on the size of the room we'd be limited to 6 people. So those are still out.

Gary WB6YRU: Regarding the property list. It would be good to have a section on what we have to sell at the flea market.

Don K6PBQ: It would be more work for Gary, but sounds like a good idea.

Wally KA6YMD: I have some stuff, both to sell and club property.

Gary WB6YRU: Several meetings ago I mentioned that we only have a few "welcome-to-the-club" packets left (sent to new members). I asked if we should print more and continue sending those out by US mail or should we switch to electronic format so new members would have it digitally. The subject was tabled for later, but we never got back to it. We now have only one left, so I need an answer. The cost of one is about \$5. It's like a 6-page color newsletter mailed in a large envelope. \$0.59 per color copy, it has 6 color pages, that's \$3.5 right there.

Don K6PBQ: It might be good to send paper, some might not have a printer.

Motion by Wally KA6YMD: Email it to them automatically, give them the option of getting paper mailed or pick it up at a meeting. Don K6PBQ: Second

The vote:

Treasurer Goetz Brandt K6GKB: (nothing heard)

Station Trustee Don Village K6PBQ: yes

Director Lou Steirer WA6QYS: yes

Director Wally Britten KA6YMD: yes

We don't have a quorum (60% of the board), the motion has not been decided.

Gregg KF6FNA: We would like to have a picnic again, maybe after the pandemic dies down, which might not be for a while. It will be outside, that should be better. Let's keep that in mind, consider it later.

Meeting adjourned at 8:21 PM (PDT)

Gary Mitchell WB6YRU, recording for the Secretary

Packet Pieces

Downloaded from the BBS packet network:

Today's scientific question is: What in the world is electricity? And where does it go after it leaves the toaster?

Here is a simple experiment that will teach you an important electrical lesson: On a cool, dry day, scuff your feet along a carpet, then reach your hand into a friend's mouth and touch one of his dental fillings. Did you notice how your friend twitched violently and cried out in pain? This teaches us that electricity can be a very powerful force, but we must never use it to hurt others unless we need to learn an important electrical lesson.

It also teaches us how an electrical circuit works. When you scuffed your feet, you picked up batches of "electrons," which are very small objects that carpet manufacturers weave into carpet so that they will attract dirt. The electrons travel through your bloodstream and collect in your finger, where they form a spark that leaps to your friend's filling, then travel down to his feet and back into the carpet, thus completing the circuit.

AMAZING ELECTRONIC FACT: If you scuffed your feet long enough without touching anything, you would build up so many electrons that your finger would explode! But this is nothing to worry about unless you have carpeting.

Although we modern persons tend to take our electric lights, radios, mixers, etc. for granted, hundreds of years ago people did not have any of these things, which is just as well because there was no place to plug them in. Then along came the first Electrical Pioneer, Benjamin Franklin, who flew a kite in a lightning storm and received a serious electrical shock. This proved that lightning was powered by the same force as carpets, but it also damaged Franklin's brain so severely that he started speaking only in incomprehensible maxims, such as, "A penny saved is a penny earned." Eventually he had to be given a job running the post office.

After Franklin came a herd of Electrical Pioneers whose names have become part of our electrical terminology: Myron Volt, Mary Louise Amp, James Watt, Bob Transformer, etc. These pioneers conducted many important electrical experiments - Among them, Galvani discovered (this is the truth) that when he attached two different kinds of metal to the leg of a frog, an electrical current developed and the frog's leg kicked, even though it was no longer attached to the frog, which was dead anyway. Galvani's discovery led to enormous advances in the field of amphibian medicine. Today, skilled veterinary surgeons can take a frog that has been seriously injured or killed, implant pieces of metal in its muscles, and watch it hop back into the pond just like a normal frog, except for the fact that it sinks like a stone.

But the greatest Electrical Pioneer of them all was Thomas Edison, who was a brilliant inventor despite the fact that he had little formal education and lived in New Jersey. Edison's first major invention in 1877 was the phonograph, which could soon be found in thousand of American homes, where it basically sat until 1923, when the record was invented. But Edison's greatest achievement came in 1879 when he invented the electric company. Edison's design was a brilliant adaption of the simple electrical circuit: the electric company sends electricity through a wire to a customer, then immediately gets the electricity back through another wire, then (this is the brilliant part) sends it right back to the customer again.

This means that an electric company can sell a customer the same batch of electricity thousands of times a day and never get caught, since very few customers take the time to examine their electricity closely. In fact, the last year any new electricity was generated was 1937; the electric companies have been merely re-selling it ever since, which is why the have so much time to apply for rate increases. Today, thanks to men like Edison and Franklin, and frogs like Galvani's, we receive almost unlimited benefits from electricity. For example, in the past decade scientists have developed the laser, an electronic appliance so powerful that it can vaporize a bulldozer 2000 yards away, yet so precise that doctors can use it to perform delicate operations to the human eyeball, provided they remember to change the power setting from "Vaporize Bulldozer" to "Delicate."

73, Herb, VK4ZEV

Rosey and Nina were best of friends and tried to do everything together. Rosey announced that she was going to start a diet to lose some pounds she had put on recently.

"Good," Nina exclaimed. "I'm ready to start a diet too. We can be dieting buddies and help each other out. And when I feel the urge to drive out and get a burger and fries, I'll call you first."

"Great," Rosey replied. "I'll ride with you to Burger King."

Three brothers ages 92, 94, and 96 live in a house together. One night the 96 year old draws a bath. He puts his foot in and pauses. He yells down the stairs and says "Was I getting in or out?"

The 94 year old yells back "I don't know. I'll come up and see." He starts up the stairs and pauses. Then he yells "Was I going up the stairs or down?"

The 92 year old HAM is sitting in front of his HF rig and listening to his brothers. He shakes his head picks up the mic and says "I sure hope I never get that forgetful." He knocks on wood for good measure. He then yells into the mic, "I'll come up and help both of you as soon as I see who's at the door".

Doctor to patient's husband: "I'm sorry. We did all that was humanly possible but we just can't wake her from her coma. It doesn't look good I'm afraid,"

"But doctor, she's so young. She's only thirty-nine."

Upon which the comatose wife said weakly ... "Thirty-seven."

Need Help?

Amateurs have a long history of helping each other. An experienced amateur who helps another is traditionally called an "Elmer." If you have a question or problem, you are encouraged to ask one of SCCARA's Elmers. Below is a list of topics and who to contact for each. If your topic isn't listed, ask one of the Elmers under the topic that comes closest and we'll ask around.

If you consider yourself to be reasonably competent in at least one area of amateur radio and would be willing help others, please fill out an Elmer form (available from the club secretary or on our web site).

Topics:

Antennas, feed-lines, tuners: NV6W, W6JPP, K6PBQ CW (Morse code): NV6W, K6PBQ DX (long distance, propagation): NV6W EchoLink: K6GKB Emergency operating, preparedness: WA6QYS HF operating techniques: NV6W, K6PBQ Homebrew projects, construction: WB6YRU Legal, FCC rules: WB6YRU License testing, new amateurs: W6JPP Lightning protection, grounding: WB6YRU Packet Network (BBS, forwarding): WB6YRU SCCARA (club inner workings): K6PBQ, WB6YRU, WA6QYS Station set-up, equipment: K6PBQ, W6JPP TVI, RFI: WB6YRU

Contacts:

K6GKB, Goetz Brandt, 408-259-7287 e-mail: goetz@ix.netcom.com

NV6W, James D. Armstrong, Jr., evening & msg: 408-670-1680

W6JPP, John Parks e-mail: w6jpp@arrl.net

K6PBQ, Don Village, 408-263-2789 e-mail: <u>donvillage7@yahoo.com</u>

WA6QYS, Lou Steirer, 408-241-7999 e-mail: wa6qys@arrl.net

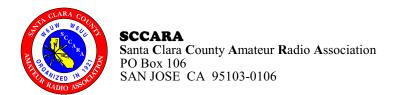
WB6YRU, Gary Mitchell, 408-269-2924 packet: home BBS N0ARY e-mail: <u>wb6yru@ix.netcom.com</u>

Newsletter Notes

Regarding the ARRL Letter article on the 100th anniversary of the arctic exploration vessel Bowdoin: I was a little surprised the photo of the crew with the radio gear came out as well as it did--specifically, you can read the caption.

I think it's interesting to note that SCCARA's founding members could have been some of the amateurs who received or even worked the ship. The two expeditions occurred just two and four years after SCCARA was founded.

73, Gary WB6YRU, editor



FIRST CLASS

ADDRESS SERVICE REQUESTED

SCCARA Membership Form for 2021 If renewing and none of your info has changed, we only need your name and call

Name:		Call:	Class:
Address:			Licensed since (year):
City:	State:	Zip+4:	
Telephone:	New Member	Renewal	I'm also an ARRL member
E-mail:			
only for club communic	cations and the SCCARA-	GRAM newsletter	(pdf)
Membership type and dues: Indivi	dual, \$20 F	amily, \$25	Student, \$10 (under 18)
Memberships start January 1 and expire Decemb Family memberships (more than one member p	ber 31. er household): please incl	ude the above info	for each member, use separate forms.
New members: Dues are prorated: dues x (11 - month) If joining in November or December: norm	x 10% For example: Ju al dues for next year, the r	uly would be \$20 > est of this year is ir	$x (11-7) \ge 0.1 = \$8)$ included free.
I want the paper newsletter deliver (Prorated, \$1.25 per month. That's			
\$ Total enclosed			

Give this completed form and payment to the Secretary or Treasurer at any meeting or mail to the club address.