# SCCARA-GRAM

Santa Clara County
Amateur Radio Association

Volume 31, Number 12 December 2015

## *Brad Wyatt, K6WR, Silent Key*

Brad Wyatt Passed away November 10th. He used to join the Friday luncheon group that Shorty AE6Z convened at the Carrow's Restaurant (now Denny's) on Saratoga Avenue in San Jose. Brad liked to share stories about the latest adventures of his cats.

Many times I had come across his familiar call, K6WR operating through the super station in Las Cruzes, New Mexico. We always had a nice chat even though I would kid him that it might be easier to go the ten miles from Santa Clara to Los Gatos on two meters rather than through New Mexico. Brad of course enjoyed talking to friends around the world and not being able to install an antenna didn't deter him. We will miss him and his life long advocacy of Ham Radio.

Lou WA6QYS

*{Brad joined SCCARA in 1977 and was given member-for-life status some time later in gratitude for his donation to the club of a 60 foot tower and TA33 antenna. -- Editor}*

## December Meeting

Our annual holiday meeting will be a luncheon on Saturday December 12th at 12:00 noon. This year our luncheon will be at Michael's at Shoreline 2960 North Shoreline Blvd in Mt. View, (east on Shoreline next to the golf course). Talk in will be on our repeater, W6UU 146.985(+).

We will also be having a gift exchange. The way it works is that everyone brings a wrapped gift suitable for a man or women costing about $10.00. This type of exchange is always a lot of fun to participate in.

Reservation need to be in by Monday Dec. 7th ( see the sign up sheet). Why not renew your membership at the same time?

I'm looking forward to seeing all of you there.

73, Don Villlage K6PBQ

## Prez Sez

**Software Defined Radio (SDR)**

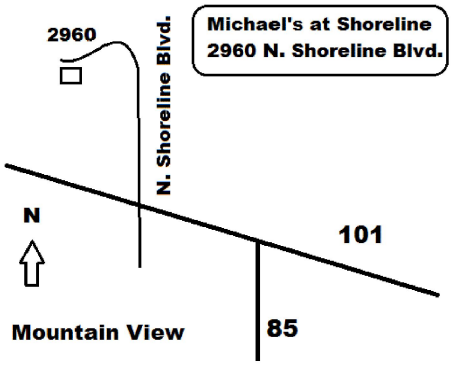
What is a Software Defined Radio? Some would say it is a digital

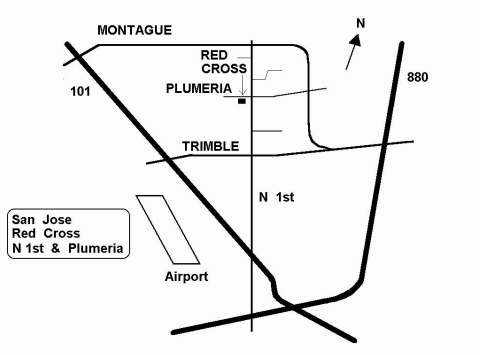
## Calendar

**12/12** **SCCARA General Meeting** -- luncheon
**12/21** **SCCARA Board Meeting**--(San Jose Red Cross, 7:30p, all are welcome)

## General Meeting

| | |
|---|---|
| Day: | Saturday, December 12, 2015 |
| Time: | 12 noon |
| Place: | Michael's at Shoreline 2960 North Shoreline Blvd in Mountain View |
| Featuring: | Luncheon (RSVP, see form) |



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

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.

**Web page: http://www.qsl.net/sccara.** (Webmaster: Wally Britten, KA6YMD, 408-293-3847, ka6ymd@arrl.net)

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**SCCARA REPEATERS**

SCCARA owns and operates two repeaters under the call W6UU:

| | | |
|---|---|---|
| 2 meter: | 146.985 - | PL 114.8 |
| 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.

**N0ARY PACKET BBS**

SCCARA hosts the packet BBS N0ARY (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.

**TELEPHONE NUMBERS**

| | |
|---|---|
| SCCARA contact Clark KE6KXO: | 408-262-9334 |
| Amateur license testing, ARRL/VEC Silicon Valley VE group, Morris Jones, AD6ZH: | 408-507-4698 |

or computerized radio. That would be wrong. Every high end amateur radio manufactured in the last 30 years contains a digital frequency display and digital frequency synthesizer. Many contain one or more DSPs (Digital Signal Processor). Most radios manufactured in the last 10 years contain a digital computer interface. So the words digital or computer alone, do not define a quote, Software Defined Radio.

So what does define SDR? It's the word, Defined. Da! You knew that but what does it really mean? It means that without software you do not have a radio. Without software you have a pile of electronic components that's not heavy enough to make a decent boat anchor.

To see how SDR is different let's look at the origins of modern radio. The First transmitters and receivers were completely different boxes … boxes sometimes separated by miles telephone wire in order to minimize interference. The advent of transistors and single sideband radio allowed sharing of many transmitter and receiver components so the one box transceiver evolved but not until many years of development.

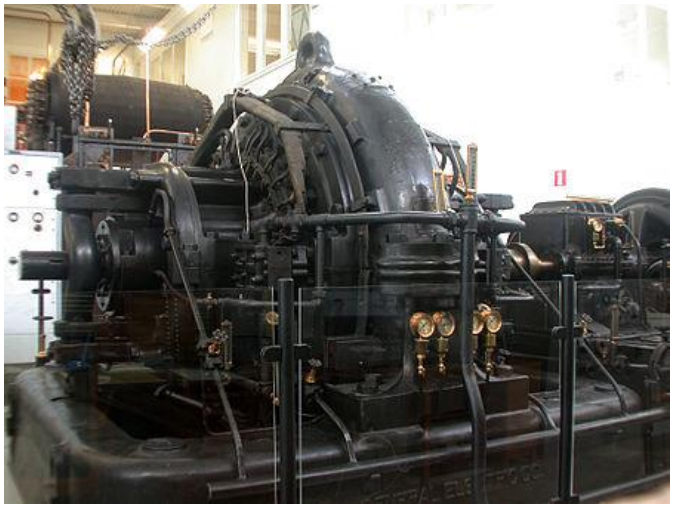
The first receivers consisted of an antenna, a detector of some sorts, and earphones. No speaker and no electronics because there was no amplification of any kind although using a big antenna increased signal strength and loudness. To overcome the lack of amplification the maximum practical transmitter power was used. In the case of Marconi's, first West Coast station in 1913 the maximum translated to a 100 KW rotary spark gap!

In this era, the concept of frequency control was unknown because arc transmitters produced damped wave signals. Damped wave signals are harmonic rich producing a broad band of frequencies so tuning was unnecessary. The only operator need only adjust the cat whisker probing the Galena crystal detector or reset the coherer detector. Not having frequency discrimination lead to obvious problems like what if there were two transmitters on at the same time (QRM). Then you might hear both but more often you heard only the strongest close signal. As an aside the interference from a nearby boat was said to have covered SOS messages from the Titanic in April 1912 giving radio a black eye. Later the Titanic review board recommended specific times be set aside just for SOS messages and so the famous 15 and 45 minutes to the hour emergency silent listening periods were established.

While De Forest and Edison were playing around with amplifying tubes a tidal change came from the GE Corporation. Invented in 1904 and first deployed two years before the Titanic sinking in 1910, the Alexanderson Alternator Transmitter was a tremendous improvement in both efficiency and signal quality because it produced a sinusoidal continuous wave (CW) signal. First running 50 KW and later 200 KW to 500 KW at 100 kHz, the alternators focused energy on a single frequency which produced a cleaner signal that could be heard at much greater distances. Also narrow banding meant the VLF band could be simultaneously shared with other transmitters without producing interference (QRM).

By 1916 many commercial radio stations had switched to alternators. However in the war time period some reasoned there was no point putting new equipment aboard old ships that were likely to be sunk by the German U-boats so arcs lingered on many ships. Also most amateurs couldn't afford alternators nor did they have the real estate needed for VLF antennas so they migrated their arcs and antennas toward the shorter wave lengths. Reflecting the upward movement in frequency a column appeared in a 1916 QST called 200 Meters and Above.

Alternators were not without problems. Unlike your automotive alternator of today these alternators were huge, noisy, and produced lots of waste heat.



You would have a hard time getting one into your garage. Second their output frequency was determined by a combination of rotational speed and number of alternator pole pairs built into the machine. A high Q resonant tank circuit with feedback loop was used to control the speed of the electric motor turning the alternator. This meant the alternator's frequency was only as good as the stability of a LC tank circuit. Ironically, when tubed oscillator and amplifier circuits replaced alternators a high Q resonant tank circuit with feedback loop also controlled transmitter frequency.

Fortunately or unfortunately 100 KHz at 20,000 rpm was pretty much the limit for alternators. Those trying to push alternators to higher speeds ran into a host of maintenance problems like smoked bearings.

(Personal Note: In the mid 1960's alternators were rediscovered by the US Navy for communication with underwater submarines. The alternators were manufactured by Technical Materials Corporation (TMC). I know because I worked where these alternators were manufactured although I did not participate in their manufacture.)

Eventually high power tubes became the mainstay of transmitter design. However neither receiving nor high power tubes existed in 1905. The battle was first entered by many seeking better methods of radio reception. However the road to radio innovation was strewn by many potholes that took the inventors out of the labs.

Nikola Tesla developed many electric motor types, funded by Westinghouse leveraging patents on his train air brake. As funder Westinghouse became the owner of the electric motor patents. With his vault of cash Westinghouse became the venture capitalist of his day. Westinghouse along with corporations like, ATT, RCA, Hazeltine, Western Electric, and GE sought to control the patents pertaining to radio and tubes along with their associated circuits. The result was geniuses like Tesla, Marconi, Edison, and Armstrong spent considerable time in the courthouse defending their patents.

Much of the controversy centered around another inventor, Lee de Forest. After inventing the light bulb Edison continued his research by adding elements to his lightbulb. By connecting an ammeter between the glowing filament and the newly added element (plate) a current flow could be measured but in only one direction. Many would say this was the invention of the vacuum diode. De Forest claimed to have added another element between parts of the Edison diode, which he called the Audion, and with this third element (grid) controlled the current flow between filament and plate. He applied for a patent on the Audion (diode) in 1906 and on the Grid Audion Detector (triode) in 1907.

The problem was Edison had not stopped at adding just one element. He had experimented by more elements. De Forest's patent was contested by Edison and others. Furthermore de Forest had corresponded with both Tesla and Edison and in one case asked for a job. De Forest defended his claim by using his laboratory notebook which he said predated Edison's notebook. The trouble was in aural arguments de Forest did a poor job of explaining his invention while Edison's explanations seemed clear. However the de Forest patent was eventually upheld and de Forest celebrated by suing his fellow inventors for patent infringement.

De Forest marketed his Audion vacuum tubes while continuing to develop circuits using his Audions. De Forest had called his second invention the Grid Audion Detector (triode). There was no doubt as a detector it was vastly superior to cat whisker detectors so de Forest enjoyed some success while other pioneers had more interest in adding amplification using the Audion between the antenna and the detector. The interest in amplified circuits lead to the development of the Tuned Radio Frequency (TRF) receiver.

The amplifying circuit was usually tuned in both grid and plate circuits. These circuits were tuned by either a variable capacitor or variable inductor. Tuning a one tube circuit meant two tuning knobs. The utility of this design was multiple TRF stages could be placed in series. Up to six TRF stages were combined to produce a very sensitive receiver but with twelve tuning knobs. There was a very heavy price to be paid for having twelve tuning adjustments. How do you tune them all? Paper dials were added to each adjustment so when a station was finally tuned in correctly a mark could be made on the paper dials. Nevertheless switching stations called for a professional tuner akin to a piano tuner.

There was another problem. Arc signals produced a raspy note which was distinctive in Morse. Often the station's note was sufficient to identify the station. On the other hand alternator's continuous waves produced a quieting effect that was harder to copy but at the same time more pleasing to the ear. In 1912 Howard Armstrong, while undergraduate at Columbia University added a bit of feedback to the Audion Detector. Armstrong's detector produced a more pleasing note and was thus easier to copy CW. He patented the circuit in 1914.

De Forest again sued claiming prior invention with his original detector circuit even though his original patent claim didn't show positive feedback. The suit went on for many years eventually ending with a U.S. Supreme Court ruling in favor of de Forest in 1934. Many say the Court decision was a mix up because it defied logic. Armstrong attempted to return his Institute of Radio Engineers (IRE) Medal of Honor, which had been awarded to him in 1917 "in recognition of his work and publications dealing with the action of the oscillating and non-oscillating audion", but the organization's board refused to let him, stating that it "strongly affirms the original award". In other words the U.S. Supreme Court may have believed de Forest but Armstrong's peers believed him.

Most would say Armstrong had the last laugh because after serving a term in the U.S. Army Signal Corp during WW I he went on to invent the Superregenerative Receiver in 1922 and later the famous Superheterodyne Receiver. Finally some thought his greatest invention to be the invention of the process called Wide Band FM (frequency modulation). Armstrong is considered by many to have contributed the most to modern electronics technology.

In what some would call a strange conclusion Lee de Forest received the 1946 American Institute of Electrical Engineers Edison Medal, for the invention of the Audion or vacuum tubes as we call them today. Many thought Edison would have turned over

in his grave for the awarding a medal bearing his name to a person who he thought stole his invention with postdated lab notebooks.

Finally back to Software Defined Radio (SDR). For at least the last 80 years the Superheterodyne Receiver has dominated receiver design. Starting with tubes, the down converter circuit has lasted into transistor and IC forms. Also in SSB transmitters a similar up converter circuit is used. Its greatest feature is many tuned circuits can be employed while only one tuning knob is needed.

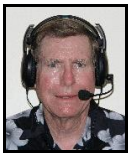
The software defined radio throws away most conventional receiver circuitry and relies on what is known as a DSP (Digital Signal Processor). Only a conventional preamp is used before ALL signals within the band are digitized. Once the signals are in digital format the DSP can perform its magic.

Conventional microprocessors execute computer instructions. DSPs execute mathematical equations. So once the band is digitized the signals can be sorted (aka tuned). Then working in conjunction with another computer, usually a laptop, the received frequency of interest can be visually selected, demodulated, and the audio feed to the computer speakers. It sounds so simple particularly if you are a visual person familiar with computers.

The idea of a SDR has been around for at least 30 years waiting for major improvements in the SDR components, mainly the analog to digital converter where there has been considerable recent development. However today there are still at least two major problems. First the idea of digitizing a wide band signal requires almost an infinite dynamic range. Unlike superhets which are susceptible only to strong nearby, in frequency and distance signals, SDRs are susceptible to nearby signals even if they are not nearby in frequency. Daja vu! This starts to sound like receiving a spark gap transmitter. Second the sale price of the SDR is only part of what you pay. You also need a high quality computer which you will want to permanently attach to your SDR.

SDR not your cup of tea? Well it is exactly the cup of tea for the military which uses spread spectrum technology as well as wide band monitoring for which SDRs are ideal. Continued usage by the military will guarantee continued SDR development. Someday SDR will be the cup of tea for most but not today.

73, Fred, AE6QL, ae6ql@arrl.net



# Sweepstakes

Your SCCARA club participated in the 2015 ARRL Sweepstakes. It all started with the gifting of a tower, a three element beam and a rotator to the club. This from the estate of Larry Spector W2QOV, a club member and recently a silent key. Lou WA6QYS and Gregg KF6FNA had originally assembled this structure at Larry's house and were therefore the logical choice to reverse the process. The ultimate destination will be the Red Cross building roof where it will feed a coax down to the club radio room. Lou and Gregg decided that the Sweepstakes would be the perfect opportunity to check out the gift and fine tune everything before the lift to the roof.

The logical location for this shakedown was the Bucky Hut in Alviso, AKA Clark's KE6KXO geodesic dome house.

Over the years Clark has established himself as a non conformist and earned degrees of freedom that the rest of us can only dream about. Putting up a twenty foot tower and an enormous three element beam on his front lawn would go almost unnoticed. Gregg had the instruction manual for the Cushcraft A3S 10-15-20 meter beam as well as the A743 40 meter add on. He did the measuring and Lou did the assembly. They measured thrice and inserted twice, marking with Sharpie pens and tightening hose clamps until all four bands were accounted for. The three elements were attached to the boom and the whole array leaned up against Clark's house for next days raising on a push up pole.

Early Thursday morning Rusty KI6ZSK showed up with donuts. Coffee was brewed and the work crew fueled up for the work ahead.

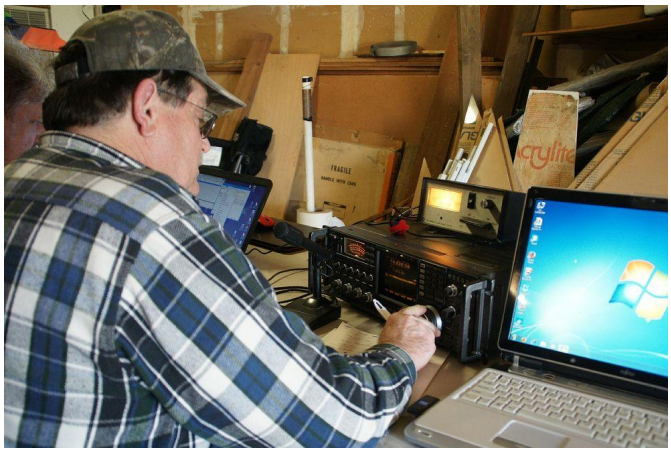
The rotator sits in a cage and is hinged to a board that was staked into the middle of Clark's lawn with four long spikes. The twenty five foot push up mast sits on top of the rotator and has two four eared thrust bearings appropriately spaced to accommodate guy lines.

All this was tilted over to Clark's driveway where it rested on a step ladder and provided the necessary elevation to attach the Yagi antenna. Once the U-bolts where tight, the coax was attached with a clearance loop that would allow unhindered rotation.

The tower was raised with little difficulty and the 90 degree guy lines tied off tightly to provide a secure foundation for the Sweepstakes rotatable antenna. The final step was attaching an antenna analyzer to see what we had. Imagine the glee when the 10-15-20 meter bands were below 2:1 across their entire width. Forty meters was better than 3:1 across the band. The antenna coax and rotor cable were brought into Clark's garage where an eight foot Costco folding table had an ICOM 781 transceiver waiting. Paul KK6HWN worked his magic and got his laptop

connected to the 781. Using N1MM software, the logging program captured whatever frequency the transceiver was displaying. The transceiver's internal tuner arbitrated any dissension from the beam.

The rest is history. Before the contest was over, Sarla WU2SWS, Praveen KK6VGB, Paul KK6HWN, Lou WA6QYS and Gregg KF6FNA took their turns contacting stations needed to sweep the sections.



A total of 197 stations logged, with 77 of the possible 83 sections contacted. All equipments worked flawlessly. Gwen KF6OTD oversaw the whole operation from her director's chair.

Visitors to the site included our president Fred AE6QL, John W6JPP and Nick N6VOA. For those who missed the event, your chance will come in one year when we will do it all again.

Goetz Brandt, K6GKB

# ARRL News

From *The ARRL Letter*, October 29, 2015

## ARRL Field Day 2015 Results Now Available

Results of ARRL Field Day 2015 are now available. These include the searchable score database www.arrl.org/results-database?event_id=68929, the soapbox, www.arrl.org/contests/soapbox, and the QST results article, www.arrl.org/files/file/ContestResults/2015/FD.pdf. A total of 2720 stations submitted entries for the ever-popular June 27-28 event.

## Use of 146.52 MHz FM Simplex Frequency Cleared for ARRL Contests

The ARRL Programs and Services Committee earlier this year unanimously adopted a recommendation from its VHF and Above Revitalization Committee to remove the rule prohibiting the use of 146.52 MHz simplex for making contest contacts. The change becomes effective in 2016, starting with the ARRL January VHF Contest.

The VHF and Above Revitalization Committee concluded that the restriction was no longer necessary. The committee felt that permitting the use of 146.52 MHz would allow new/curious contesters possessing only FM-mode radios to stumble upon more contacts, increasing their chances of being drawn further into VHF+ contesting -- the primary aim of the Revitalization Committee.

The change will also be incorporated into the ARRL Field Day rules. This change eliminates Rule 1.8 in the "General Rules for ARRL Contests Above 50 MHz," with subsequent Rule 1 sections renumbered accordingly.

-- Thanks to Dan Henderson, N1ND, Regulatory Information Manager/Acting Contest Manage

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From *The ARRL Letter*, November 19, 2015

## Amateur Radio Parity Act Passes Senate Committee, Gains Cosponsors

The Amateur Radio Parity Act S. 1685 took an essential step forward on November 18, when the US Senate Committee on Commerce, Science, and Transportation voted to report the bill favorably and without amendment. It was one of a half-dozen bills that were approved by the committee in a brief markup session. S. 1685 was approved on a voice vote, with two Senators -- Bill Nelson (D-FL) and Brian Schatz (D-HI) -- asked to be recorded as voting "no."

"Our work is not finished on the Senate side of Capitol Hill, although this is a huge step forward," said ARRL President Kay Craigie, N3KN. She urged ARRL members to continue to write, call and e-mail their Senators about S. 1685 to build up its support for the future, saying, "We know that members' response to the call for a communications blast last week made all the difference for some Senators on the committee."

S. 1685 picked up another Senate cosponsor on November 18, when Senator Jerry Moran (R-KS), who sits on the Commerce Committee, signed aboard the bill. "ARRL members in Kansas should contact his office to say thanks," President Craigie said. "Having an additional cosponsor who's on the Committee is especially good news."

On hand to observe the Committee mark-up session were ARRL Hudson Division Director Mike Lisenco, N2YBB; ARRL CEO David Sumner, K1ZZ, and ARRL General Counsel Chris Imlay, W3KD.

President Craigie encouraged ARRL members in Florida and Hawaii to keep contacting Senators Schatz and Nelson, urging them to change their minds about the legislation. "Don't be harsh or angry," she advised. "Keep it factual and courteous, and don't give up."

On November 5, US Senator Al Franken (D-MN) signed on as the second cosponsor of S. 1685. That legislation and its US House twin, H.R. 1301, call on the FCC to extend the limited federal pre-emption of PRB-1 to cover private land-use restrictions such as deed covenants, conditions, and restrictions (CC&Rs).

H.R. 1301 has 114 cosponsors as of November 18. President Craigie said ARRL members should continue to urge their Representatives to cosponsor H.R. 1301 and to thank those who already have signed on.

## AO-85 Commissioned and Turned Over to AMSAT-NA Operations

Fox-1A (AO-85) has been formally commissioned and turned over

to AMSAT Operations, which is now responsible for the scheduling and modes. Fox-1A is AMSAT-NA's first CubeSat.

"Many new techniques are incorporated, and lessons will be learned, as with any new 'product." said AMSAT Vice President-Engineering Jerry Buxton, N0JY. "We will incorporate changes from what we learn in each launch, to the extent possible, in subsequent Fox-1 CubeSats. To our members, we want to say that the Fox Team is very proud and pleased that our first CubeSat is very successful and hopefully will be for some time."

The Fox-1 Project is a series of CubeSats. A total of five will be built and flown. Launches already have been scheduled for three more, and a new NASA CubeSat Launch Initiative proposal will be submitted for the fifth launch.

The Fox Team noted that an apparent lack of receiver sensitivity and difficulty in turning or holding on the repeater with the 67 Hz CTCSS tone are probably the most notable observations about AO-85.

"We have determined a probable cause for the sensitivity issue, and while that can't be fixed on AO-85, we are taking steps to prevent similar issues on the rest of the Fox-1 CubeSats," Buxton assured. The November/December edition of AMSAT Journal will include full details on these technical issues.

## World Radiocommunication Conference Approves Global 60 Meter Allocation!

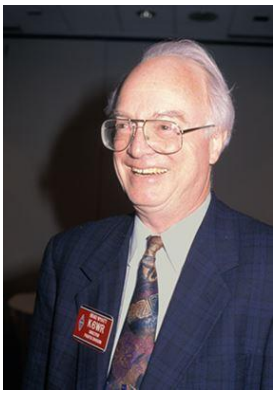
The Plenary Meeting of the 2015 World Radiocommunication Conference (WRC-15) in Geneva has approved an allocation of 5351.5-5366.5 kHz to the Amateur Service on a secondary basis, with a power limit of 15 W effective isotropic radiated power (EIRP). The November 18 decision on Agenda Item 1.4 was adopted on two back-to-back readings. Some Region 2 countries -- but not the US -- will be permitted up to 25 W EIRP. With this action, and despite conditions that are more restrictive than had been hoped at the start of the Conference, the Amateur Service has obtained its first new global HF allocation since 1979. While the Final Acts of the conference are expected to take effect on January 1, 2017, the new band will not become available to amateurs until their national telecommunications administration amends its rules and licensing conditions. Those administrations that already permit amateurs to operate in the 5 MHz range under certain conditions and on a not-to-interfere basis, including the FCC, will be considering whether, how, and when to modify those arrangements in light of the international allocation.

The International Amateur Radio Union (IARU) team is doing what it can to influence the agenda for WRC-19. The agenda could include addressing amateur spectrum requirements in the 50-54 MHz band in Region 1, which could lead to at least partial harmonization of the 6 meter band worldwide. A proposed agenda item to align the 160 meter allocation in Region 1 with the rest of the world is no longer under active consideration.

The WRC-19 agenda will also likely pose spectrum defense challenges, including possible consideration of the 420-450 MHz band to accommodate a new allocation to the space operations service for satellites in non-geostationary orbit that are described as "small satellites" or "satellites with short duration missions." One or more bands above 10 GHz may be up for consideration for 5G smartphone use. The bounds of these potential defensive items, however, are still under discussion by the conference and will not be settled until its final week.

The IARU team continues to monitor several other WRC-15 items that appear to be headed toward acceptable conclusions. WRC-15 continues through the signing of the Final Acts on November 27.

## Past Pacific Division Director Bradley W. "Brad" Wyatt, K6WR, SK



Past ARRL Pacific Division Director Brad Wyatt, K6WR, of Los Gatos, California, died on November 10 after an illness. He was 86.

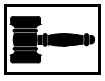
An ARRL Life Member, Wyatt served as the Pacific Division Director from 1994 until 2000, when he decided not to run for another term. He previously served as Vice Director of the Pacific Division from 1992 until 1994.

Wyatt retired from IBM in 1984. He received bachelor's and master's (MBA) degrees from Stanford University. Wyatt was a past president of the Los Gatos Kiwanis Club.

In November 2001, Wyatt's article, "Remote Controlled HF Operation over the Internet," appeared in QST. A year later, Wyatt and co-authors Stan Schretter, W4MQ, and Keith Lamonica, W7DXX, won the QST Cover Plaque Award for their collaboration on the article, "A Ham Radio Public Utility HF Station."

# Meeting Minutes

## General Meeting, Nov. 9, 2015



KAISER HOSPITAL BUILDING, 700 HOMESTEAD RD., SANTA CLARA ROOM B-06

President Fred Townsend AE6QL opened the meeting at 19:32. Introductions were made.

Announcements: 1) Don K6PBQ made 27 contacts for the CW SWEEPSTAKES. The SSB SWEEPSTAKES will be November 21-22, 2015 and the CLUB STATION will be open. 2) Gregg KF6FNA thanked Rusty KI6ZSK for bringing donuts, and Lou WA6QYS and Gwen KF6OTD for bringing cookies to the meeting. 3) Lou announced that the next SVECS BREAKFAST would be on the 4th. Saturday of January, 2016. 4) Andy KI6ZHC has moved back to the Bay Area and was welcomed back. 5) Don K6PBQ announced the 12 noon December 12, 2015 HOLIDAY LUNCHEON at MICHEAL'S SHORELINE. Sign up form is in the SCCARA-GRAM. Cost is $25.

ELECTIONS FOR 2016 OFFICERS: Fred asked for any new nominations. None were given.

| OFFICE | NAME |
|---|---|
| President | Fred Townsend AE6QL |
| Vice President | Gregg Lane KF6FNA |
| Treasurer | Goetz Brandt K6GKB |
| Secretary | Praveen Akunuru KK6VGB |
| | |
| Director - 1 year | Bill Staehle AG6EM |
| Director - 2 year | Lou Steirer WA6QYS |
| Director - 2 year | Wally Britten KA6YMD |

( Directors with 1 year left in their term: Clark Murphy KE6KXO and Lloyd DeVaughns KD6FJI)

Wally KA6YMD moved ACCLAMATION OF A WHITE BALLOT. Don K6PBQ seconded. Carried.

The Installation of Officers will be at the HOLLIDAY LUNCHEON.

Gregg introduced Ned AC6YY who spoke on "AMATEUR RADIO DIGITAL MODES."

Fred adjourned the meeting at 20:38 and refreshments were shared.

Gregg Lane KF6FNA Secretary

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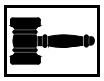
## Board Meeting, Nov. 16, 2015



Red Cross Building, 2731 N. 1st. St., San Jose, CA
status: unreviewed

The SCCARA BOARD MEETING was called to order by President Fred Townsend AE6QL at 19:57.

Attendance: President Fred Townsend AE6QL; Vice President / Secretary Gregg Lane KF6FNA; Treasurer Goetz Brandt K6GKB; Trustee Don Village K6PBQ. Directors: Lou Steirer WA6QYS, Wally Britten KA6YMD, Clark Murphy KE6KXO, Richard Clare WB6EWM. Absent: Director Lloyd DeVaughns KD6FJI. Guests: Gwen Steirer KF6OTD, Paul Gorny KK6HWN.

Announcements: 1) SCCARA HOLIDAY LUNCHEON, 12 noon, December 12, 2015 at Micheal's Shoreline. 2) SVECS QUARTERLY BREAKFAST, Saturday, January 23, 2016. 7:30 set up, 9am breakfast, 10am speaker.

Secretary's Report: 1) The October Board Minutes as published in the SCCARA-GRAM were reviewed. Lou moved to accept as submitted, second by Rich. Carried. 2) The November General Meeting Minutes that recorded the 2016 Election Results were read by Gregg KF6FNA. Rich moved to accept, second by Don. Carried.

Treasurer's Report: Goetz K6GKB submitted account balances as of 11-16-15:

| | |
|---|---|
| CHECKING | 6,857.26 |
| SAVINGS | 500.07 |
| CASH | 221.15 |
| TOTAL | 7,578.49 |

Trustee's Report: Don K6PBQ 1) Reported that he will open the Club Station on Saturday, November 21st at noon. 2) Don gave permission to use the SCCARA CALL SIGN at Clark's residence for participation in the 2015 SSB SWEEPSTAKES on November 21-22, 2015.

Vice President's Report: Gregg KF6FNA 1) stated that the March 2016 Meeting will be a Dinner Meeting. 2) The Cushcraft A3S that is going up at the Club Station needs 200' of coax and 210' of 8 conductor (16/18 gauge) rotor cable. Fred stated that he would research prices.

President's Report: Fred AE6QL 1) Asked about ideas for FIELD DAY 2016. Clark mentioned a lot in Alviso at the Red Brick Building. Fred mentioned that San Jose Races had free use of a San Jose City Park and that SCCARA might use that same park for 2016 since San Jose Races alternates parks each year. 2) The Club Yeasu Radio used for Digital needs a tuner. Goetz mentioned that he has a 200w LDG Tuner that he would loan the club so that SCCARA doesn't need to purchase a tuner at this time. 3) December is light on SCCARA BOARD topics. Clark moved to cancel the DECEMBER BOARD MEETING, second by Goetz. Carried.

Repeater Report: 1) Goetz announced that we have a back up controller. It is an ADVANCED COMPUTER CONTROLL RC-85. 2) Fred announced that San Jose was offering to buy a new STATION MASTER ANTENNA for the SCCARA 2M REPEATER. The subject of the repeater location was not specified. Gregg moved to migrate the SCCARA 2M REPEATER to the residence of Goetz K6GKB and that location become the primary repeater. Second by Rich. Carried. Fred will contact Ryan Broughton, Director of the Office of Emergency Services, San Jose, and advise him about the SCCARA BOARD decision for the 2M Repeater location. It was decided that there is no need to replace the 2M antenna.

New Business: Bob N3FAW has decided to step down as the Digital Station Chairman at the Club Station. Ned AC6YY has agreed to accept this position.

Fred adjourned the meeting at 21:49.

Gregg Lane, KF6FNA, Secretary

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# Packet Pieces

### Downloaded from the BBS packet network:

==========
Date: 24 Jul 2010 01:32
From: W1GMF@W1GMF
To: HUMOR@USA
Subject: Clever Signs
---

Sign over a Gynecologist's Office:
'Dr. Jones, at your cervix'
**********

In a Podiatrist's office:
Time Wounds All Heels
**********

On a Septic Tank Truck:
Yesterday's Meals--on Wheels
**********

At a Proctologist's door:
To expedite your visit, please back in
**********

On a Plumber's truck:
We Repair What Your Husband Fixed
**********

On another Plumber's truck:
Don't sleep with a drip; Call your plumber!
**********

On a Church's Billboard:
7 days without God makes one weak
**********

At a Tire Shop in Milwaukee:
Invite us to your next blowout
**********

At a Towing company:
We don't charge an arm and a leg: We want tows
**********

On an Electrician's truck:
Let Us Remove Your Shorts
**********

In a Nonsmoking Area:
If we see smoke, we will assume you are on fire
and take appropriate action
**********

On a Maternity Room door:
Push! Push! Push!
**********

At an Optometrist's Office:
If you don't see what you're looking for, you've
come to the right place
**********

On a Taxidermist's window:
We really know our stuff
**********

On a Fence:
Salesmen Welcome! Dog Food Is Expensive!
**********

At a Car Dealership:
The best way to get back on your feet: miss a car payment
**********

Outside a Muffler Shop:
No appointment necessary; We hear you coming
**********

In a Veterinarian's waiting room:
Be back in 5 minutes. Sit! Stay!
**********

At the Electric Company
We will be de-lighted if you send in your payment.
However, if you don't, you will be.
**********

In a Restaurant window:
Don't stand there and be hungry; come on in
and get fed up
**********

In the front yard of a Funeral Home:
Drive carefully! We'll wait...
**********

At a Propane Filling Station:
Thank heaven for little grills
**********

Sign on the back of a SepticTank TrucK..
CAUTION - This Truck is Full of Political Promises

==========

Date: 27 Mar 2011 18:24
From: W1GMF@W1GMF
To: HUMOR@USA
Subject: Computers, as Depicted in the Movies

---

Word processors never display a cursor.

You never have to use the space-bar when typing long sentences.

All monitors display inch-high letters.

High-tech computers, such as those used by NASA, the CIA, or some such governmental institution, will have easy to understand graphical interfaces. Those that don't, have incredibly powerful text-based command shells that can correctly understand and execute commands typed in plain English.

Corollary: you can gain access to any information you want by simply typing "ACCESS ALL OF THE SECRET FILES" on any keyboard.

Likewise, you can infect a computer with a destructive virus by simply typing "UPLOAD VIRUS".

All computers are connected. You can access the information on the villain's desktop computer, even if it's turned off.

Powerful computers beep whenever you press a key or whenever the screen changes. Some computers also slow down the output on the screen so that it doesn't go faster than you can read. The *really* advanced ones also emulate the sound of a dot-matrix printer.

All computer panels have thousands of volts and flash pots just underneath the surface. Malfunctions are indicated by a bright flash, a puff of smoke, a shower of sparks, and an explosion that forces you backwards.

People typing away on a computer will turn it off without saving the data.

A hacker can get into the most sensitive computer in the world before intermission and guess the secret password in two tries.

Complex calculations and loading of huge amounts of data will be accomplished in under three seconds. Movie modems usually appear to transmit data at the speed of two gigabytes per second.

When the power plant/missile site/whatever overheats, all the control panels will explode, as will the entire building.

If a disk has encrypted files, you are automatically asked for a password when you try to access it.

No matter what kind of computer disk it is, it'll be readable by any system you put it into. All application software is usable by all computer platforms The more high-tech the equipment, the more buttons it has. However, everyone must have been highly trained, because the buttons aren't labeled.

Most computers, no matter how small, have reality-defying three-dimensional, active animation, photo-realistic graphics capability.

Laptops, for some strange reason, always seem to have amazing real-time video phone capabilities and the performance of a CRAY Supercomputer.

==========

Date: 19 Oct 2015 02:56
From: GM3YEW@GB7YEW
To: HUMOUR@WW
Subject: Chess

---

A group of chess enthusiasts checked into a hotel and were standing in the lobby discussing their recent tournament victories. After about an hour the manager came out of the office and asked them to disperse.

"But why?" they asked as they moved off.

He said "Because I can't stand chess-nuts boasting in an open foyer."

# 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 including 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 from the club secretary.

Topics:
Antennas, feed-lines, tuners: NV6W, W6JPP, K6PBQ
Lightning protection, grounding: WB6YRU
Station set-up, equipment: K6PBQ, W6JPP
TVI/RFI: WB6YRU
Homebrew projects, construction: WB6YRU
Packet Network (BBS, forwarding): WB6YRU
Code operating and installations: NV6W, K6PBQ
DX (long distance/propagation): NV6W
Emergency operating/preparedness: WA6QYS
HF operating techniques (SSB, CW): NV6W, K6PBQ
Legal/FCC rules: WB6YRU
SCCARA (club inner workings): K6PBQ, WB6YRU, WA6QYS
EchoLink: KK6MX
License testing, new amateurs: W6JPP

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

KK6MX, Don Apte, 408-629-0725
e-mail: kk6mx@aol.com

W6JPP, John Parks, 408-309-8709
e-mail: w6jpp@arrl.net

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

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

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

# Newsletter Notes

Announcing: the SCCARA ***VIDEO*** Archives!

In August I announced the *SCCARA-GRAM* is being archived and made available on the club web site, www.qsl.net/sccara.

Did you know SCCARA has some videos too? They're being transferred to digital and made available on our web site and on DVD.

SCCARA has five VHS tapes and one 16 mm film (7" reel). I have already transferred the tapes to DVD and to mp4 video files -- those are on our web site now. The film is being transferred at a commercial audio-video company as I write this.

The tapes are a mix of SCCARA and non-SCCARA content. The non-SCCARA videos include ATV, an ARRL video on Amateur satellites and Amateur astronauts on the Space Shuttle, and a teacher in New York who uses Amateur Radio as a teaching aid in the classroom. The SCCARA videos are of our Field Day at Mt. Madonna in 1992 and club member KC6SOC contacting astronauts on the Shuttle at a local school.

The 16 mm film was made back in the 1920's by the first members of SCCARA. As far as I'm concerned, this is the best thing we have in the archives! I'm very happy to make it easily available to you. Plus, having it digitized allows everyone to have their own copy -- that's important in case something happens to the film. The same goes for all the archives.

The direct link is: http://www.qsl.net/sccara/video_archives.htm. See the page for more details (at the bottom).

This project is still a little bit of a work in progress, everything hasn't been settled yet. For now, you'll have to contact me to get these on DVD. If you don't have a fast internet link, I can copy the mp4 video files onto your USB flash drive.

73, Gary WB6YRU, editor and unofficial archivist

# December Meeting Sign-up

Our annual December meeting will be a luncheon on Saturday December 12th at 12 noon. This year our luncheon will be at Michael's at Shoreline.2960 North Shoreline Blvd in Mountain View. You have a choice of three entrees, $25.00 each. We need your reservations no later than Monday Dec 7th. At this point, better give me a call: 408-263-2789, we can settle up later.

I hope to see you all there! 73, Don Village K6PBQ

For the annual meeting in December, sign me up for the following lunch(es) at $25.00 each:

____Roast beef English cut ____Chicken Florentine ____Broiled Salmon

Name:_____ Call:_____ Total for lunch(es): $_____

Give this form (or copy) with payment to the treasurer, or mail to: SCCARA , PO Box 106, San Jose CA 95103-0106

**SCCARA**
**S**anta **C**lara **C**ounty **A**mateur **R**adio **A**ssociation
PO Box 106
SAN JOSE CA 95103-0106

**FIRST CLASS**

**ADDRESS SERVICE REQUESTED**

## SCCARA Membership Form for 2016

If none of your info has changed, fill in name and call only

Name: _____ Call: _____ Class: E A G T N

Address: _____ Licensed since (yr): _____

City: _____ State: ____ Zip: _____ - _____ Licence Expiration Date (mo/yr): _____

Telephone: _____ ☐ New Member ☐ Renewal
☐ I'm also a member of the ARRL

E-mail: _____

You'll get a short e-mail notice each month letting you know a new SCCARA-GRAM (pdf) is ready for download.

Memberships start January 1 and expire December 31. Annual dues are: **$20 Individual $25 Family $10 Student** (under 18)
For family memberships (members at the same address), please include the above info for each member, (use separate forms).

**New members**:
If joining in January: normal dues
If joining in February through October: dues x (11 - month) x 10% (e.g. for July, that's: $20 x 4 x 0.1, which is $8)
If joining in November or December: normal dues. That's for next year, and the rest of this year is included free

☐ **I want the newsletter on paper delivered by U.S. Mail** for an additional $30 per year, prorated ($2.50 per month).
So that's $27.50 if starting in February, $25 if starting in March, $22.50 if starting in April, $20 starting in May, etc.

**$ _____ Total membership payment for: ☐ individual ☐ family ☐ student**

Give this completed form (or copy) with payment to the Secretary or Treasurer at any meeting or mail to the club address.

Rev. 02/28/2015