
QSA-5

The Marin Amateur Radio Society Monthly Newsletter

Founded 1933

November 2017

Presidents Corner

Tom Soskin, W6MTS

Past, Present and Future...

Another year has come and gone and we have an opportunity to look back and appreciate all that we have accomplished, take a look at where we are today and look forward to what we hope to achieve in the future. To think that it was just five years ago when I joined the club and when I look back, I have made friends, shared some good memories and learned a lot. Not that it's been all roses, we have lost some dear friends, and have had our share of challenges.

All the things from our past bring us to where we are today. We had another banner year with public service, we continue to grow our membership and have expanded our efforts in the education of new HAMs by laying the foundation to mentor Scouts through JOTA (Jamboree on the Air), the largest scouting event in the world. We have a lot to be proud of and I would like to thank everyone involved for your contributions, big or small, for we all play a part in making this club what it is today.

As we look to the future, there will be new challenges, opportunities, and experiences but we will see some changes too. There will be some changes to our club's board. We will be moving our Field Day location back to the Marin Rod and Gun Club. Our clubhouse needs a little work, ok, a lot of work. And along with all this, we will continue to grow, learn, educate and be of valuable service to our community.

Continued on page 2

What's Happening in Radio

Member Submissions

ARRL News

Pampanito Report

Membership Meeting Minutes

Board Minutes

From the Editor

Ed Essick, K6ELE

Annual Christmas Party

Next Wednesday is our annual Christmas party. This event gives us all an opportunity to meet the other members of our club and share stories about ham radio while enjoying a good meal.

We have new caterer this year and a menu that should please all of those who attend the dinner. There are over 40 club members who have signed up to attend this year and you can still sign up by sending an email to rsvp@w6sg.net and pay at the door. Social hour starts at 5:30 and dinner is at 6:30. Hope to see you there.



As your club president for that last two years, I thank you. I thank you for your support, your hard work, dedication and persistence. I also thank you for your acceptance, guidance and friendship. Together we have accomplished a lot and I am honored to have been a part of it.

Enjoy your holidays, may Santa bring you many wonderful new toys and I hope to see you all at the Christmas party.

73

Tom Soskin, W6MTS

What's Happening in Radio

Contest Calendar for December

Ten-Meter RTTY Contest, 0000Z-2400Z, Dec 3
 ARRL 10-Meter Contest, 0000Z, Dec 9 to 2400Z, Dec 10
 OK DX RTTY Contest, 0000Z-2400Z, Dec 16
 DARC Christmas Contest 0830Z-1059Z, Dec 26
 ARRL Rookie Roundup, CW, 1800Z-2359Z, Dec 17

Member Requests

I am searching for a FTS-8 tone board for a Yaesu FT-736r. I vaguely remembered a Yaesu accessory box with a number similar to that in the clubhouse a couple of months back. If anyone knows of one or has a spare one.

This is to set up the FT-736 that Mark Yuan won in the raffle earlier this year as an emergency communications radio for Lucas Valley/Marinwood/Mont Marin CERT and RACES Coordination.

Thanks,
 Stan W AI6NF
Stanw@spoontronics.com
 (916) 201-9621

Member Submissions

Submitted by Kris Backenstose



Animals and their mating songs.

ORIGINAL CREDIT TO: LARSEN ADAPTED BY: NSHT

RACES Exercise

Michael Fischer
 RACES set up its portable repeater and a HF NVIS station. The purpose was to demonstrate that our communications could be better than the County's radio system in the valleys of West Marin.

Ed: Near vertical incidence skywave, or NVIS, is a skywave radio-wave propagation path that provides usable signals in the range between groundwave and conventional skywave distances—usually 30–400 miles. NVIS uses HF radios.



Setting up the antenna

ARRL NEWS

FCC Dismisses Radio Amateur's Petition to Revise Call Sign Rules

The FCC has dismissed the petition by Thomas Alessi, K1TA for a change in Part 97 rules to allow call signs consisting of one letter, followed by two numbers, followed by one letter. The 1XX1 format would be available only to Extra class licensees and would provide 7,800 more four-character call signs.

The FCC said presently there about 15 million call signs available in the sequential call sign system and is sufficient for license needs. A similar petition was made in 2010 and rejected by the FCC

The ARRL International Grid Chase

A new and exciting operating event will kick off on January 1, 2018, at 0000 UTC (New Year's Eve in US time zones), when the [ARRL International Grid Chase](#) gets under way. The year-long event hopes to build on the success of the highly successful 2016 National Parks on the Air (NPOTA). The objective is to work stations on *any* band (*except* 60 meters) in as many different Maidenhead grid squares as possible, and then upload your log data to ARRL's Logbook of The World (LoTW). [Registration](#) in LoTW is free, and it costs nothing to participate

Many hams are familiar with grid squares from the VHF/UHF and satellite realms, and everyone lives in one. ARRL's VUCC is based on grid squares, and some contests on HF, VHF, and UHF also use them as a scoring factor.



The Maidenhead grid square system divvies up the entire globe into 324 fields, each containing 100 grid squares 1° latitude \times 2° longitude in size. With 32,400 potential grid squares, it's not likely that anyone will run out of challenges, even though some grid squares are surrounded entirely by water or are in areas that are uninhabited or difficult to access.

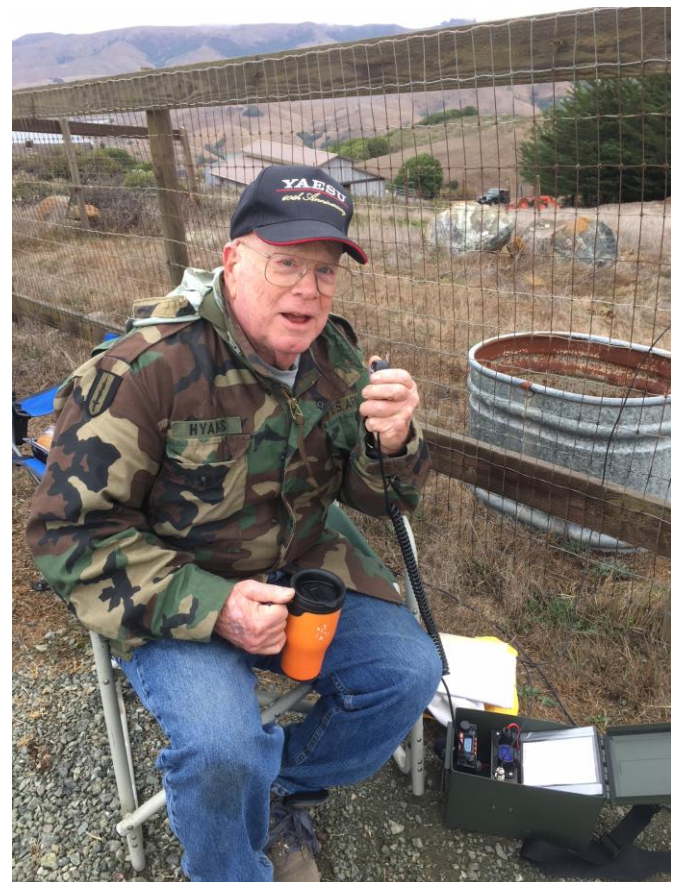
If you don't know your grid square, David Levine, K2DSL, has an [online calculator](#). Just enter a postal address, ZIP code, or even a call sign, and his site will tell you the grid square for that location. For example, enter "W1AW" and the site will return "FN31pr." For the purposes of the ARRL International Grid Chase, though, just the two initial letters and the two numbers that follow (e.g., FN31) are all you'll need to know.

Continued on page 4

RACES Exercise



Antenna ready to test



Transmitting on VHF radio

The ARRL International Grid Chase

Continued from Page 3

Once you get active in the chase and start uploading your log data, each new grid square contact confirmed through LoTW will count toward your [monthly total](#). Getting started is simple. Turn on the radio and just call CQ or "CQ Grid Chase" or listen for others doing the same. Make a contact, exchange grid squares, log it, and move on to another. At the end of each month, your totals on the Grid Chase leader board will reset to zero, although the system retains these to determine top finishers in various categories at the end of the year.

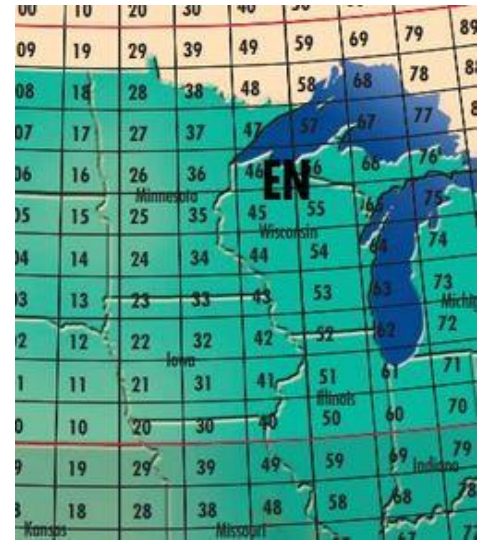
Any contact you make in 2018 can count toward your Chase score; it doesn't have to involve an exchange of grid squares. As long as the other operators also participate in LoTW, you'll get credit automatically when they upload their logs. This means that contest contacts also count, as will contacts with special event stations or other on-air activity that uses LoTW to confirm contacts.

Some radio amateurs live in sparsely populated grid squares, and if you're one of those, you could find yourself handling a pileup! Expeditions to hard-to-reach or rare grid squares undoubtedly will evolve. You also can travel to one of those grid squares yourself. Some vehicle or handheld GPS units can be set to display when you are in a particular grid square. Apps are available for smartphones or tablets, such as *Ham Square* for iOS devices or *HamGPS* for Android devices.

There are no restrictions on modes or bands, as long as they are legal. Satellite contacts are valid for the Chase. The event is open to all radio amateurs.

Full details of the ARRL International Grid Chase will appear in the December 2017 issue of *QST*. The digital edition is available on Friday, November 10.

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A map segment showing part of the EN field of grid squares. Note that some grid squares are very nearly surrounded by water. [Photo courtesy of Icom America]

New Digital Modes Changing Complexion of Bands and Perhaps of Ham Radio

The wave of software-based digital modes over the past several years has altered the atmosphere of the HF bands. Some suggest the popularity of modes that make it possible to contact stations neither operator can even hear has resulted in fewer CW and SSB signals on bands like 6 meters and 160 meters. Traditional modes require far more interaction and effort on the part of the operator; the newer digital modes, not so much. The recent advent of the still-beta "quick" FT8 mode, developed by Steve Franke, K9AN, and Joe Taylor, K1JT -- the "F" and the "T" in the mode's moniker -- has brought this to a head. Some now wonder if FT8 marks the end of an era and the start of a new, more minimalist age.



Joe Taylor, K1JT.

"We've been as surprised as anyone about the rapid uptake of FT8 for making QSOs on the HF bands," Taylor told ARRL this week. Rather than viewing FT8 as a total game-changer, he sees a dividing line between such digital modes and more traditional modes.

"SSB and CW are general-purpose modes," Taylor asserted. "They are good for ragchewing, DXing, contesting, emergency communications, or whatever. FT8 and the other modes in [WSJT-X](#) are special-purpose modes. They are designed for making reliable, error-free contacts using very weak signals -- in particular, signals that may be too weak for the more traditional modes to be usable, or even too weak to hear."

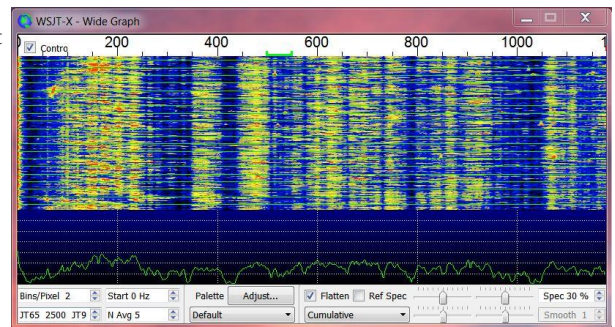
Taylor notes that the information exchanged in most FT8, JT65, and other digital-mode contacts "is little more than the bare minimum for what's considered to be a valid contact." In addition to call signs and signal reports, stations may exchange grid squares and acknowledgments.

Radio amateurs recently commented in response to a Top Band Reflector post, in which Steve Ireland, VK6VZ, averred that because of FT8, "160-meter DXing has changed, perhaps forever" in recent weeks. Ireland said he downloaded FT8 but just couldn't bring himself to use it on the air. "My heart isn't in it," he wrote. "My computer will be talking to someone else's computer, and there will be no sense of either a particular person's way of sending CW or the tone of their voice. The human in radio has somehow been lost."

In his [blog](#), Steve McDonald, VE7SL, compiled not only Ireland's posts, but some responses to it, although not identified by name or call sign. One commenter suggested that the game-changing aspect of FT8 is that those who typically operate CW or SSB will gravitate to FT8. "The amount of activity on the FT8 frequency of any band is phenomenal," the commenter observed. A few complained that no skill is involved in making contacts using computer-based digital modes.

Another suggested that FT8 is already falling victim to its own success, with too many stations crowding around the designated FT8 frequencies. Others were more philosophical, with remarks along the lines of this one: "It is allowing people who have smaller stations the opportunity to get on and use their radios and a computer to make contacts they never would have been able to make. This is great for ham radio!"

Taylor would agree. As he sees it, FT8 won't replace modes such as CW or SSB. "Nevertheless, it's clear that -- at least in the short term -- many hams enjoy making rapid-fire minimal QSOs with other hams, all over the world, using modest ham equipment," he said. "For this purpose, FT8 shines."



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2017 MARS CHRISTMAS PARTY



2009 Christmas Party

Planned Menu:

Salad, Turkey, Ham, Whipped Potatoes, Green Beans, Bread, Deserts, Appetizers, Soft Beverages



PLEASE JOIN US!

\$25.00 Per Person (Payable on our webpage at: http://w6sg.net/christmas_dinner.php)

RSVP by 11/30 to: rsvp@w6sg.net to reserve your space.

\$30.00 per person pay-at-the-door, if you did not RSVP by 11/30.

Arrive at 5:30 PM for visiting.

Dinner around 6:30 PM.

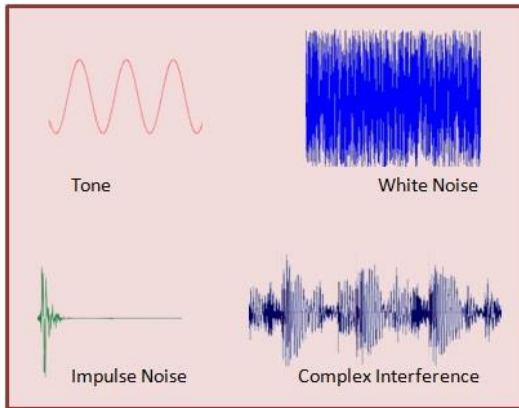
Door Prizes

Volunteers appreciated for decorating and / or clean-up.

Contact: Cal Anbar at: angrycal@live.com to volunteer.

Local RFI Signal Content – Four Basic Types

John Fallows, VE6EY



Let's consider the four basic types of local RFI signal content. We will see when and where a noise canceler can make a critical difference to your radio listening.

Before we start, a few thoughts about terminology. We are really talking about cancelling or reducing *interference*, not noise. Interference is something that makes it hard to discern a signal. It could be noise (e.g. atmospheric or thermal noise) but it could also be another signal that we might call “noise”.

Now let's consider some rather simple forms of noise: tones and white noise. I call these simple because they can be analyzed and reduced with simple techniques based on statistics.

Tones, often called “birdies” are just sine waves. If a tone is on a nearby frequency, it also gets demodulated and interferes with your desired signal. Computer and network gear produces tons of birdies around your house. Usually they are quite weak and more annoying than disruptive. You can use a noise canceler, for example with a local noise antenna next to the source, but this is hard when there are many different sources.

Besides, your receiver has a tool that does a good job removing tones: the notch filter. Typically, notch filters are located in IF or AF stages. They can recognize tones because of their statistical regularity – high correlation over time – and just remove them. Some software defined radios also include tracking notch filters at the front end.

Second, white noise is similar to atmospheric noise – very broadband and statistically uncorrelated. Some local RFI signal content contains white noise. But, similar to tones, your receiver has a tool for that: noise reduction. NR can track and remove uncorrelated noise, typically by 10 dB or more.

Local RFI Signal Content – Getting More Complex

Impulse noise is generally power line and motor ignition noise. Basically, it is a voltage spike that gets radiated. In engineering terms, impulse noise is created by rapid change of voltage over time, or $\delta V/\delta t$. Short time domain impulses create very broad and strong frequency domain noise. Unlike tones and white noise, you can't treat it; you have to remove it.

Enter the noise blanker, which has been around since 1936. NB works by effectively turning your receiver Off for the duration of the impulse. A separate circuit or algorithm senses the (very) sudden rise in the noise floor and uses a switch or gate to remove the pulse before it can get into the radio. Some NB are free running (reactive) while others are synchronous (predictive). The synchronous NB usually provides blanking at the frequency of your power lines – 50 or 60 Hz.

Finally, we must increasingly deal with complex interference – for which there are not yet any real tools built into radios. This is where the noise canceler shines by reducing the interference before it gets to your radio. With complex interference, local RFI signal content contains tones, impulses and white noise all together.

With software defined radio, I dream that one day tools for complex interference reduction will arrive. But they ain't here yet.

Pampanito Report



Hi All

I was able to get to the USS Pampanito on Saturday, November 11th to run the Dedicated Day of Operation (DDO). I did not put out a general call for this DDO because I was not sure I would be able to be on the boat, but I did make it after all.

Band conditions were fair, but there was little or no short skip on the 40 meter band. SSB QSO's were made with the USS Midway on 7250 kc. Good signal reports both ways to San Diego. Also worked our XO, Jerry, WA6BXV, on 40 meter CW. Jerry was QRP from Novato. Visitor traffic aboard the boat was light in general. Nice weather for Veterans Day, but surprised to find no Veterans Day activities dockside this time around.

I plan on being on the boat Saturday, December 2nd, the first Saturday of the month. Can't make the usual second Saturday of the month schedule for December. If anyone out there would like to help out, please let me know! Happy Thanksgiving to everyone!

73,

Den Regan, K6ZJU
CO Pampanito A.R.C. NJ6VT
USS Pampanito, SS-383
Pier 45, Shed "A"
San Francisco

General Membership Meeting Minutes November 3, 2017

The meeting was called to order at 19:31 hrs. by Vice-President Kris Backenstose.

A round of introductions was the first order of business. Twenty members or guests were present.

The agenda was adopted as presented.

The approval of the minutes of the October 06 General Membership Meeting were approved as published in *QSA-5*.

No quorum was present at the October 12 Board Meeting. Next Board Meeting is November 09, 2017.

Curtis was not present. We have about 120 members. We have 6 new members from the class.

Secretary – David was absent. Randy took the minutes. Correspondence: Junk

Treasurer – Dave submitted no report.

Standing Committee Reports:

Club Station and Facilities: Doug reported on the roof, and the trusses that needed to be replaced. The contractor said “expensive”. Doug is seeking a price for the whole job.

Education: Instruction Team Leader Kris Backenstose reported that the Technician class was concluded. Thank you to the teachers.

Technical / Repeaters: Doug reported that he plans to install the Fusion repeater in January .

Public Service: The schedule is complete for 2017.

Comm Van: John Boyd is getting a price for graphics on the van.

VE: We have exam session scheduled on November 18 at 9:00AM. At the VE Session for the class, we had 5 new Technicians and one Amateur Extra.

RACES: There is a drill tomorrow; about 25 persons are participating.

Old Business:

Doug reported that the Board of Directors election slate will be, for 3 positions: Kris Backenstose, N5HIT; David Chaney, AA6AE; Tom Soskin, W6MTS; and Steve Smith, WA1TOV.

Board of Directors nominations from the floor: Edwin Jamie Taylor, KK6OLF and John Boyd, KE6ORI.

Doug announced the election for Board of Directors would be out after the Board Meeting on November 09.

New Business: None.

Good of the Order: Daylight Savings Time ends Sunday 11/05.

There being no further business, the business meeting was adjourned at 20:05.

Melvin Hendrickson made a presentation on his book, “*Questions and Answers, About Repairing Old Radios and Old Tube Equipment*”. Respectfully submitted, Randy Jenkins, KA6BQF, and Acting Secretary.

The official copy of these minutes shall reside in the secretary’s records on file at the corporate office.

Next General Meeting: Christmas Party, December 06, 2017. January 05, 2018.
Next Board of Directors Meeting: November 09, 2017

Board of Director's Meeting Minutes

November 9, 2017

- 7:41 PM President Tom Soskin gavels the meeting to order.
- 7:42 PM President Soskin initiates a review of the agenda for the meeting. The MARS Board Members and attendees review the document. He asks about the last meeting, which did not have a quorum present to take actions. Does anybody have suggestions on how to increase attendance? MARS club member and former Board Member Randy Jenkins raises the issue of a budget for gifts for the MARS Christmas party that happens on December 6, 2017.
- 7:44 PM There is a motion, second, and vote to adopt the agenda for the Board Meeting.
- 7:45 PM President Soskin has no commentary for the President's Minute.
- 7:46 PM The Secretary David Chaney conducts a mail review of mail received at the MARS club PO Box.
- 7:50 PM There is no budget or treasurer's report. Please refer questions to Dave Hodgson and look at the breakdown of expenses on the back of the agenda.
- 7:50 PM Board Member Curtis Ardourel declares that there are now 127 members of MARS Marin Amateur Radio Society in his membership report. Curtis has updated the club web page for W6SG.net for 2018 MARS membership renewals. Curtis raises the issue of members and guests paying to attend the club Christmas party in advance versus paying at the door and how the website allows people to pay for Christmas party attendance. In the past, Randy Jenkins had a spreadsheet to track the proposed and paid attendance. Board Member Cal Anbar speculates that 50 or more people will attend the party. There is further discussion about how many will actually attend the party.
- 7:57 PM Vice-President Kris Backenstose discusses MARS club education. He recaps The last Technician class experience. 6 class members passed their FCC exams. There was discussion about the breadth of instruction and the importance of individual study. There was agreement that class participants succeeded according to their individual degrees of motivation, i.e. study, asking questions, and corresponding STEM knowledge. Class members were first and foremost interested in VHF communication with handheld devices. Kris comments on an aside about the recent fires north of Marin. He experienced, read, and heard that ALL communications failed in some areas. Ham radio communication to help was primarily limited to logistical support. Kris continues the education report saying that he has accumulated 41 email addresses using the computer program Mailchimp in his efforts with the class. These are the addresses of people interested in amateur radio and/or the MARS club. He wishes congratulations to all of the students and invited them all to the next membership meeting. Kris discusses the growth of the MARS club by sharing his experiences leading the "Marin Makers" meeting on the website meetup.com. Meetup is a good social network for people in various hobbies and fields to "cross-connect," meaning to talk, share experiences, and to share expertise. Perhaps Meetup would be good for the MARS club although it is expensive at \$50 for 6 months. There is much discussion about reaching out to young people interested in engineering and radio in the makers hobby groups and those men and women would be good people to proselytize about the fun and public service of amateur radio. Kris has been to a number of maker's fairs. Another San Francisco Bay Area amateur radio club EBARC participated in a maker's fair. Kris will investigate opportunities and report

MARS Board Meeting Minutes, page 2,

back to the Board about possible participation by the MARS club.

- 8:28 PM Trustee Doug Slusher gives the Club Station and repeater report. The recent repair work to the sewer system came to a total of \$16,493.00 which includes \$2000.00 for the repaving on Shell Drive over the hole. Roof repair is still pending and Doug has contacted 3 roof repair companies for estimates. He has yet to locate someone skilled in rafter repair. The roof repair will have to wait until Spring 2018 and if necessary a temporary patch made to the water leak in the Winter. Doug discusses club members and guests who come to the radio repair service group on Sunday mornings. A small committee is created with Tom Soskin, David Chaney, Marc Bruvry, and Doug Slusher to meet on Sunday morning to come up with a plan to give the radio repair area more workbench space, better lighting, and easier access to observers. The committee may make a proposal for new equipment if any is needed.
- 8:41 PM Club Members Michael Fischer and Randy Jenkins will assemble a list of public service events for 2018. A thank you lunch for efforts and volunteers in 2017 and date will be proposed.
- 8:42 PM Randy Jenkins says that the next VE amateur radio test session will be on November 17, 2017 at the Alto clubhouse.
- 8:43 PM There is discussion about the club Christmas party in December 2017. Board Member Cal Anbar has spoken with 2 caterers and gave the example of one quote for \$31.00 a plate. This is too expensive. He is trying to find a caterer who will provide food for \$25.00 a plate or less. There is a Board vote with motion, second, and vote to create a budget of \$1,250.00 for the dinner meal. Board members agree that the cost will be \$25.00 per person paying ahead and \$30.00 at the door. There is a motion, second, and vote to spend \$800.00 for gifts to attendees including 3 \$100.00 gift certifications to Ham Radio Outlet. President Tom Soskin discusses the use of electronic lists of winners or engraving plaques. There are winners of awards in the club dating back to 1961. He would like to make a list either way dating back to the merging of the two clubs in 1991. Doug Slusher volunteers to get a price quote for engraving winner's lists on plaques from a trophy shop.
- 9:00 PM President Tom Soskin raises the issue of distinguishing between regular MARS club dues and "family" dues. There are questions about other categories of dues including "student" and "senior" dues. There is a motion, second, and vote to address only "Family" dues and to raise them to \$35.00 for 2018 at the MARS club.
- 9:06 PM MARS club member John Boyd gives a slide show prevention of prospective graphic designs for the MARS club communication van. He has created drawings of logos and artwork for the van and worked with Davis Sign Company. He presents several alternative mockups. He suggests a price for the work altogether coming to \$1,300.00 for pictures and lettering on the sides, front, back, and roof of the van. The designs would be fixed to the van permanently. Board Members selected the version "B" An extra \$100.00 for "reflectorized" lettering on the rooftop was rejected. There was much discussion about the various themes and designs presented by John. The proposal is well done. There is a motion, second, and vote for the artwork as proposed by John Boyd and instruction for him to commence getting it done. John is approved for \$1,400.00.
- 9:24 PM MARS club member Steve Smith is dropped as a nomination for the next Board elections by his own choice. He told Trustee Doug Slusher that since there were a number of candidates that he would like to withdraw. His nomination for the next election is dropped.
- 9:29 PM President Tom Soskin calls for an executive meeting session.
- 10:16PM There is a motion, second, and vote to close the executive session.
- 10:17PM There is a motion, second, and vote to spend \$500.00 and no more for an attorney consultation.
- 10:19PM There is a motion, second, and vote to adjourn the board meeting. President Tom Soskin gavel the meeting closed.

Marin Amateur Radio Society Officers and Board Members:

President

Tom Soskin, W6MTS
tomsoskin@gmail.com

Vice President

Kris Backenstose, KK6AYC

Secretary

David Chaney, AA6AE

Treasurer:

Dave Hodgson, KG6TCJ 707 978-2560

Board Members

Cal Anber, N6TIA 209-275-5252
Marc Bruvry, KF6VNT 492-9292
David Chaney, AA6AE 818-332-6029
Ed Essick, K6ELE 456-1715
Mitch Martin, WU1Q

Other Positions:

Education Chair

Randy Jenkins
Kris Backenstose Instruction Team Leader.

VE Liaison

Randy Jenkins

Building Co-Managers

Doug Slusher
Dave Hodgson

Trustee for W6SG

Mitch Martin, WU1Q

Trustee for K6GWE

Doug Slusher KF6AKU

Sunday Emergency Nets

Mark Bruvry

DX Representative of ARRL

Jerry Foster WA6BXV 892-3829

Public Service Event Coordinators

Randy Jenkins KA6BQF 510-526-4089
Rob Rowlands, NZ6J, Michael Fischer, K6MLF

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