



# QSA-5

## The Marin Amateur Radio Society Monthly Newsletter

Founded 1933

April 2018

### Presidents Corner

May first, or May Day, or if you are a Wicca Beltane is half way between the vernal equinox and the summer solstice also called a Cross Quarter day. While we reckon the vernal equinox the first day of spring 20 March does not seem to herald spring to me. I am more inclined to think of May first as the first day of spring because it looks more like spring.

As of this date we have completed three public service events. Two were orientation and training session and one was the Ridge to Bridge in support of the Bay Area Ridge Train Council. I have received an number of photos from the event and I will post them on the website soon. I want to thank our public service committee Michael Fischer K6MLF, Rob Rowlands NZ6J, and Randy Jenkins KA6BQF for organizing or participation and all our members who turned out for these events. This weekend will see our fourth event the Miwok 100K. If you have not volunteered for a public service event, check out our schedule on the website at <http://w6sg.net/site/public-service/>.

This time of year also means the Field Day is just around the corner. June 23rd through the 24<sup>th</sup> once again we will be partnering with Redwood Empire DX Association for field day. There will be more information about this years event coming soon. The bottom line is that it is time to crawl out of our ham shack dens into the light from our long dark winter hibernation.

73 de WA6UDS

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### From the Editor

Ed Essick, K6ELE

### Contesting In May

This month provides the opportunity to work a number of different contests on HF. You don't have to enter these contests to make a contact, just get on and try it.

Sure I know we have lousy band conditions due to the decline of the sunspots, but if you tune around this month you will hear a lot of signals on the air. One reason for this activity is the number of state QSO Parties in May. The state QSO parties start off with the 7<sup>th</sup> call area on May 5<sup>th</sup>. It's not a specific state but a group of the Northwest and Southwest. The 7<sup>th</sup> call area includes Washington, Idaho, Oregon, Nevada, Montana, Wyoming, Utah, and Arizona. Some of these states are generally hard to work due to the lack of ham activity. So here is the chance to add to your state totals, if you are working on them, and have some fun. This was the way I finished my ARRL WAS (Worked All States) award by working the 7<sup>th</sup> call area contest.

The individual state QSO parties cover the Northeast to the Southeast. Delaware and New England, which can be hard to work, are available this month. Indiana and Arkansas should have a lot of hams operating, so these states will be easier to work.

For those of you who are CW operators, the King of Spain contest and the CQ WW WPX CW contest are later in the month. There should be a lot of activity for the CQ WW WPX CW contest as a large number of hams throughout the world work this contest.

So there you have it. May is a month which can give you the opportunity to work a lot of HF stations. I know I will be on the air for many of these contests, so if you hear me, give me a call.

K6ELE

## What's Happening in Radio

7th Call Area QSO Party, 1300Z, May 5 to 0700Z, May 6

Indiana QSO Party, 1500Z, May 5 to 0300Z, May 6

Delaware QSO Party, 1700Z, May 5 to 2359Z, May 6

New England QSO Party, 2000Z, May 5 to 0500Z, May 6 and 1300Z-2400Z, May 6

VOLTA WW RTTY Contest 1200Z, May 12 to 1200Z, May 13

Arkansas QSO Party 1400Z, May 12 to 0200Z, May 13

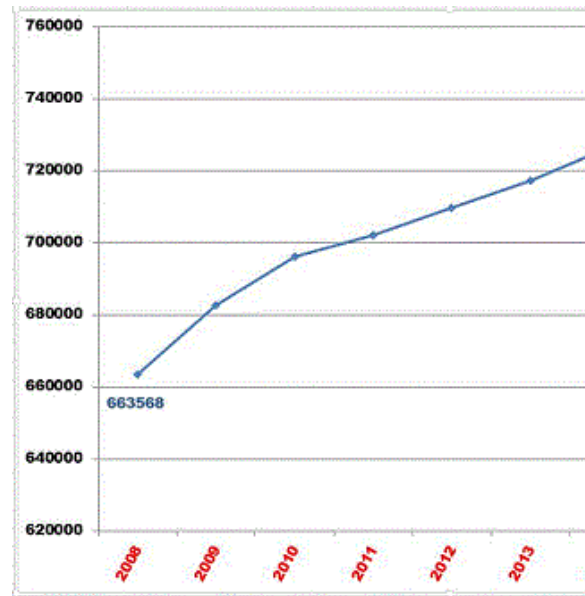
His Maj. King of Spain Contest, CW 1200Z, May 19 to 1200Z, May 20

CQ WW WPX Contest, CW 0000Z, May 26 to 2359Z, May 27

## ARRL News

### More than 30,000 New Ham Licensees and 7,000 Amateur Radio Exam Sessions in 2017

For the fourth year in a row, more than 30,000 new licensees joined the Amateur Radio ranks, and ARRL Volunteer Examiner Coordinators (VEC) conducted more than 7,000 Amateur Radio exam sessions, serving some 35,350 candidates for a new or upgraded license. At the end of December 2017, the US Amateur Radio population stood at 748,136.



**The Amateur Radio population has grown steadily over the past decade.**

At nearly 378,000, Technician licensees represented the largest segment, with General (174,206), Amateur Extra (145,034), Advanced (41,938), and Novice (9,056) trailing. Licensee numbers showed continued growth across all classes except Advanced and Novice, which the FCC no longer issues; those numbers continue to drop.

"I'm hopeful that the number of new licensees will be more than 30,000 at the end of this year," ARRL VEC Manager Maria Somma, AB1FM, said. "I would love to see this trend continue!"

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## New Members

Welcome to:  
Eric Ferguson, KA6USJ, Concord

## Public Service Report – Ridge to Bridge

You all made it possible for Tina Cuevas, the Ridge Trail Council's organizer, to rescue a situation that started out as a disaster, to put it back on its feet, and make it a friendly, successful event for thee 300+ participants, no kidding.

As you know (or surmised,) the Presidigo bus service somehow failed to put the event on their calendar. Their manager had to wake up bus drivers and hustle them down to the Presidio more than an hour late. As a result, some folks rolled their eyes and left without checking out. Some folks rushed to hop on a late bus without checking in. Some folks apped an Über and showed up helter-skelter at their respective trailheads. It was quite the hectic scene, but Tina navigated it smoothly, finding solutions the dozens of folks shouting questions and suggestions--all praise to her.

Having you all there, reporting in, supporting the rest stop captains with calm, professional experienced aplomb gave her—and us at net control—the confidence to shift into a smooth operations mode. Indeed, even with the tattered, incomplete signup sheets at the start, we actually think we accounted for everyone—again, thanks to many of you who pored over the rest stop signups and patched together a pretty darn' good set of lists for us to check in the final hours.

We had great weather for it—except those of us at the Golden Gate stop and net control found it got downright chilly and windy after the sun went below the ridge.

We did have several potentially serious issues to respond to: one participant fainted on Diaz Ridge with heart palpitations. A LOT of EMTs and public safety officers responded from County Fire, the Sheriff, Nat'l Park Service Police, State Park ranger, and Muir Beach Fire. She was able to walk out the mile and a half to Shoreline where she was evaluated in the ambulance. After hiking out to join them, we took her and friends back to the Presidio. Also with us was a participant whose husband unexpectedly had to check into the hospital, so was in a rush to meet him there. One of our own radio-hikers later suffered from dehydration in the same general area; we sent a cyclist back to find him and give him a bottle of water. Much later, a participant on the shuttle back from Tennessee Valley fainted on the bus—so we dashed over to the Presidio Fire Station and their EMTs met the bus to assess and stabilize her.

*Continued on page 4*

## New Licenses 2008 - 2017

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
28,066	30,144	27,528	24,072	27,082	28,886	33,241	32,077	32,552	32,196

Despite the optimistic influx of 32,196 newcomers last year, the net growth of 5,349 -- about 0.72% over December 2016 -- reflects some 27,000 expired or cancelled licenses in the FCC database over the past year. In making the case for changes to the entry-level license, the ARRL Board's Entry-Level License Committee referred to "the large number of Baby Boomers (roughly born 1945 - 65) [who] will soon be aging off the licensee rolls." The committee predicted the likelihood of "a significant decline in the number of hams, unless we take steps to reverse it."

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## More-Frequent Spotless Days Signal Start of Lengthy, Deep Solar Minimum Phase

The sunspot numbers have not been good, and it does not seem they'll be getting much better anytime soon. According to the April 12 "K7RA Solar Update," no sunspots were seen over the April 5 - 11 reporting week. Solar flux has been sitting in the 60s lately and is forecast to remain at that level for the next 45 days. We're not at solar minimum yet, though; better days lie ahead -- eventually.

Top contestor Frank Donovan, W3LPL, asserts that solar precursors like spotless days, which correlate physical solar phenomena with future solar activity levels, are much better indicators of progress toward a solar minimum -- a broad phase of the solar cycle -- than of a specific event, such as the bottom of a broad solar minimum. Not only that, these and other solar precursors are useful in predicting the likely strength of Solar Cycle 25, although accurate predictions of the strength and timeframe of the Cycle 25 solar maximum aren't possible until the new sunspot cycle is under way.

"We entered the Cycle 24 solar minimum with the onset of 8 spotless days in June 2016," Donovan pointed out. "We had only 32 spotless days in 2016. We had 15 spotless days in a row in March 2017, followed by relatively infrequent spotless days for the next 7 months."

The frequency of spotless days accelerated in early November 2017, with 13 spotless days in a row. That was followed by many more spotless days over the next 5 months. In all, 2017 experienced 104 spotless days.

"The frequency of spotless days accelerated again last month, when we had 25 spotless days," Donovan noted. "We've already had 54 spotless days during the first quarter of 2018. This data and comparisons to frequent spotless days during the last solar minimum suggests that we may have just begun a period of very frequent spotless days for approximately the next 2 years, similar to the period of September 2007 through January 2009."

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Tennessee Valley was able to give us the names of the last few participants who left their station so that Golden Gate could look out for them—first pumps accompanied the report that they had reached that spot. Tina and Janet McBride, the Council's ED, set a 6:30pm cutoff at Golden Gate, and the last two hikers arrived there about 7:30. Mark Couch, the intrepid, calm, steadfast and conscientious "Sweep of Sweeps" was able to jump past the "private property" signs to get to Wolfback Ridge Road so that Janet and I could drive over the Bridge to pick him up about 8:30pm. And with a whimper, not a bang, the 2018 R2B came to a close.

From setup in the dark well before dawn to shut-down in the dark well past sunset—a long day.

You all evidenced terrific radio practice—short, succinct, to-the-point transmissions without rambling or repetition. As Jerry Kay KG6IAC noted when he said his "hat was tipped to all of you:" very good radio-presence and radio voices. Thanks to those of you who have already submitted your after-action reports and photos. Please send yours before your memory grows cold. Especially the first and last times help us plan for an even better event next year. And any suggestions you might have—fire them along!

Thank you again—Rob NZ6J, Larry KK6QPE and I look forward to work with you all, without exception, in future events.

Seven-three,  
Michael K6MLF

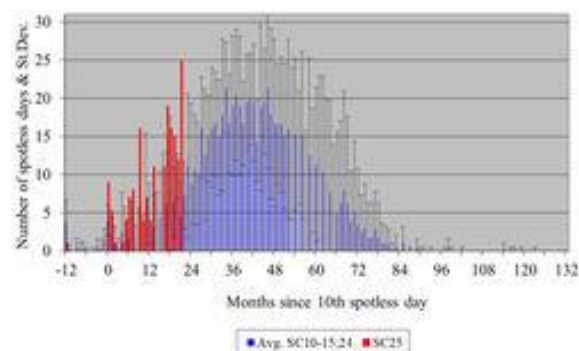
## New 630-Meter Band Reported "Very Busy"

Amateur Radio got two new bands last year, and amateurs are beginning to use them. Ralph Wallio, W0RPK, of Greenville, North Carolina, and others who took part in ARRL's WD2XSH Part 5 Experimental operation or have a deep interest in what now is the 630-meter band (472 - 479 kHz), say activity is picking up.

Wallio maintains an informal database that tracks the activity of stations on a state-by-state basis, as well as how many states each station has worked. Topping the list is Eric Tichansky, NO3M, in Pennsylvania, with 36 states worked on 630 meters, and 35 confirmed, including Hawaii and Alaska. NO3M, who also operates as W3CDX, reports eight DXCC entities worked on the new band. Wallio said modes frequently used for 630-meter contacts include CW, JT9, WSQ (weak-signal QSO), and FT8, with occasional additional digital mode experiments and SSB.

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Donovan said the next solar precursor is frequent extended periods of spotless days. For example, 2016 saw 14 spotless days in a row, March 2017 had 15, November 2017 saw 13, and early March experienced 14.



This [chart](#) shows the number of spotless days -- in red -- since the 10th spotless day of the onset of solar minimum in July 2016. In blue are the average numbers of spotless days during sunspot minimums following weak sunspot cycles similar to Solar Cycle 24.

"Long periods of spotless days will become even more frequent as we go deeper into solar minimum," Donovan predicted. Once extended periods of spotless days become more frequent, another solar precursor will become important, he said.

"New high-latitude, opposite-polarity Cycle 25 sunspots will then begin to appear more frequently, perhaps by late next year," Donovan said. "More frequent Cycle 25 sunspots will signal that we're approaching the bottom of the [Cycle 24] solar minimum phase."

An ongoing solar precursor that could herald the future strength of Cycle 25 is the intensity of the solar polar magnetic fields *prior* to the Cycle 24 solar minimum, Donovan said. "The good news is that the solar polar magnetic field strength is already slightly stronger than it was prior to the last solar minimum," he said. "This suggests that Cycle 25 will be somewhat stronger than Cycle 24."

Donovan said if the long periods of spotless days end in about 1 year that will be a precursor of a stronger Cycle 25. If they take more than 2 years to end, however, it will portend a weaker Cycle 25.

*Reprinted with permission ARRL Letter 4/12/18*

## Getting on the Air with HF Digital

Steve Ford, WB8IMY, of the ARRL has written a guide to HF digital modes. If you are interested in exploring these newer digital modes, check out the second edition of this book.

## **General Meeting Minutes**

### **April 6, 2018**

The meeting was called to order at 19:30 hrs by President Curtis Ardourel.

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

There will not be a presentation after the meeting.

The agenda was adopted as presented.

The approval of the minutes of the March 02 General Membership Meeting were approved as published in *QSA-5*.

President Ardourel reported that the Board of Director's Meeting taken in March. The bank accounts were discussed.

There were five reports under "Fun with Ham Radio".

Mike McNevin, from San Rafael; Brian Delahunt, KM6RJR; Terry Buxton, KK6KGX; Larry Loomer, KI6LNB; Dennis DeVilbiss, KD7UWD; James Renney, KI6RPG; and Eric Ferguson, KA6USJ were reported as new members.

Secretary – No report.

Treasurer – Ed Essick reported on January. We have \$66,929.97 in cash assets, for the quarter.

Standing Committee Reports:

Membership: We have 107 members. Curtis sent out reminders to those members have not renewed.

Club Station and Facilities, The temporary roof patch is in place, it has be tested by the rains today; no leaks. We still waiting for a total a price to replace the roof.

Education: No Report.

Technical / Repeaters: Doug will be changing the PL on the Tam West repeater to 192.8.

Public Service: The thank-you lunch / orientation meeting was scheduled for March 24 at 11:00 at the clubhouse. We had 43 attendees.

Comm Van: The logos have been installed. Doug will arrange for a smog test.

VE - We have exam session scheduled on Sunday, May 20, at 1PM.

Old Business: None

New Business: None

There being no further business, the business meeting was adjourned at 20:10.

Respectfully submitted, Randy Jenkins, KA6BQF, Acting Secretary.

## Board Meeting Minutes

April 12, 2018

- 7:34 PM The meeting is called to order by president Curtis Ardourel.
- 7:36 PM Curtis asked for a review and any additions to the agenda.
- 7:37 PM The agenda is adopted.
- 7:37 PM The board approve the minutes as red in QSA-5 there is a motion, second, and unanimous vote.
- 7:38 PM Secretary's minute . There there is a review of the mail. The club has received its insurance documents.
- 7:43 PM Treasurer's report. Ed Essick presents a written report the report has been generated by the new finance program. The board has reviewed the journal entries and discussions of the contents and amounts with Mark Munn CPA. Ed is working on reconciling discrepancies between the financial report generated from past receipts and documents and the upcoming tax report. Previously, the accounting lacked proper documentation and the new system is a remedy to that. Ed has been in contact with the renter about the rental rates. He is in contact with the former Treasurer Dave Hodgson and is in receipt of emails still going to Dave. There is much discussion.
- 8:00 PM Curtis put out a past due email to members for 2018 dues. Curtis will begin to purge former members from the roll. 81 percent of last year's members have renewed their membership. Credit for interest in membership is given to Kris. Kris has arranged interesting Friday evening club meeting presentations that have spurred interest in club membership.
- 8:04 PM Education. Vice-President Kris Backenstose recounts the last weekend of training classes provided by MARS for California Civil defense workers. He salutes VE Randy Jenkins for arrainging a last minute VE Technician exam session for the civil defense students. Most passed the test-only 2 applicants failed. They were highly motivated paramilitary students who needed to pass for their mandatory training. Board Member Tom Soskin talked with the US Navy Commander allied with the group of students about better communication if more need training. This is so that instructors and curriculum may be assembled workers. Kris gives Larry from MDARC praise for his participation in the training. Board Member Mitch Martin suggested a short roster of MARS VEs for short-notice testing for the future, and is tasked, in turn, with making the list. Kris suggests MARS paying Larry for his fuel and bridge toll-a one time circumstance because he was heavily solicited to help at the last minute and contributed to the success of the classroom. Mitch opposes any payments for the principle of volunteerism. A long discussion ensues with agreement that Larry's one-time and significant contribution to public service merits remuneration. Generally, the work at MARS will be volunteer. This will require better long-term planning in the future. Kris requests a budget for education advertising to help with long-term planning and he will create a proposal.
- 8:28 PM There is a motion, second, and unanimous vote to pay Larry for 51 miles and 2 bridge toll fees = \$60.00. Mitch requests for the record his opposition to any further payments for such things.
- 8:30 PM Technical and Facilities report by Doug Slusher. He will go up to the repeater on Tam on Sunday April 15. Mitch reports that he has been observing 5th order DCS interference on 2 meters which he believes are from the "PAPA" group in the Central Valley. The interference is regular tone bursts. Mitch has screen snapshots of their interference. Doug responds that the MARS repeater used to get similar interference from a weather station in Coalinga. Doug is going to change the

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repeater PL from 179.9 to 192.8 to battle interference from radio operators in Sacramento.

8:36 PM There is no discussion or report from Public Service or VE.

8:37 PM Old Business. Kris speaks briefly to wall plaques commemorating past MARS officers and says that he can't find a plaque manufacturer. Doug Slusher says that he knows of one and will look up the business to continue with this project. Doug will get the wording of said plaques and make an effort to find the manufacturer to make them for the Alto clubhouse wall.

8:40 PM Old Business. Discussion about the video release form for MARS speakers and presenters. President Curtis Ardourel begins the discussion reminding the board members about Kris' submission of a tentative release form previously. Board Member Tom Soskin has a litany of thoughts on the subject partly by having been the previous president. He states that release forms should designate MARS as the "producer," the club needs to be very careful about wording that would include 'sale' or 'trade,' and that the club needs to specify the use of the media (video) including being for club business, education, advertisement, etc. Curtis suggests that language for the release form should include "promoting club activities and education." Curtis would be willing to work with Kris to make changes and emendations to the current form he has and then he would consult with a lawyer. Curtis is willing to experiment with changes. Kris proposes language where 'producer' is changed to 'club' and asks then, if anybody who is a member of MARS could use the media? Or, would use require permission of the board? Kris will make edits and make a further report to the board.

8:45 PM New Business. Rental increase for the upstairs tenant is discussed. The tenant pays \$2335.00 currently. Treasurer Ed Essick has a copy of the current lease. There is much discussion about the amount of rent, the calculation of utilities, and the cost of upcoming repairs (especially expensive and anticipated roof repairs). There is discussion about balancing the quality of the tenant (she is considered to be a very good renter) versus the increasing costs of the old building. Ed is adamant about having a consistent and sustainable business model for determining the rent amount and increases and fairness to the tenant. Mitch insists on consistency in the rental and business relationship so that there is transparency. The date of rent payment due is discussed. Curtis articulates 2 questions: 1, How do we revise the lease? and 2, To what amount to we raise the rent to (if we raise it)? Mitch would like to see the lease and the payment history. Tom would like to see a history of rental raises for the history of the tenancy. The anniversary of the lease is in August and the lease review is in April therefore-and thus the current discussion. Board Member Marc Bruvry would like a further report from Treasurer Ed Essick in May about increasing utility costs and building maintenance costs in order to suggest a reasonable rental rate. Ed says that we have to generate enough money to maintain the building. Ed will give Curtis a copy of the lease dated from 2012.

9:06 PM The New Business discussion about the upstairs rental continues with questions about the electrical usage and increases incurred because the renter is charging (or was charging) an electric car. Kris has a photo of the last electrical meter reading. Doug Slusher says that the Alto clubhouse has a '2nd Tier' electrical usage rate and he will report at the next board meeting what the tenant's usage is for the car. This could be paid separately by the tenant or included in the lease revision.

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9:08 PM New Business. Curtis discusses club membership cards.

There is a discussion about the value of such cards. They are good for marketing the club and may contain valuable information about repeater addresses and tones. Club member Michael Fischer has pitched for cards that would have a tangible value. Above all, MARS cards should produce good will. They could be handed out on a 'membership night' or at the club picnic. Curtis detects that there is growing interest in a MARS club card, and he will speak to Steve Fischer about designing a card. There is a side discussion about Secode and electromechanical encoding devices. In the old days, a membership card could have contained useful codes for operating such devices whereas the current club card information would be mundane things like telephone numbers, email addresses, and repeater information.

9:25 PM New Business. The discussion about by-laws is tabled.

9:25 PM New Business. Website navigation. Curtis presents a history of the W6SG.net website. The site uses Wordpress and the design is not logical.. Others such as Randy Jenkins have added much content. Curtis is willing to undertake a review of the site and he can make changes, (such as the menu system) but he is not able to perform the overall analysis of the site. The MARS club needs to hire a website developer to do that properly. Curtis outlines 2 questions: 1, do we want to redesign the site wholesale, and 2, do we want to re-architect the navigation system? Other questions arise then. Who will do it? Mitch asks if club members will help out? Curtis will put the question out on the QSA-5 and Mitch will announce it on the Sunday morning 2-meter net. Tom Soskin would like to see a site map. Tom asks about the analytics of the site. Curtis responds that the W6SG.net site has a number of idiosyncratic and inconsistent features that need to be 'cleaned up.' Curtis will talk to a developer named Craig Mirken for advice and report back to the board.

9:36 PM New Business. There has been discussion about smaller MARS club signs that could be hung or presented on smaller tables like card tables. Kris says that such signs would be good for advertising and Doug Slusher says that member Randy Jenkins has a proposal that he will present. Curtis mentions that he has made a tri-fold flyer years before. Curtis asks Doug to talk with club member John Boyd.

9:37 PM For the good of the order. Tom Soskin talks about repeaters and how he has become acquainted with K7IJ Bruce Wachtell, who lives at Stinson Beach. The man has several repeaters and other club members know him. They discuss his repeaters. Tom tells the club also that ATT had a number of UHF repeaters that have been since pulled down.

9:46 PM There is a motion, second, and vote to adjourn the meeting.



**Marin Amateur Radio Society W6SG.NET, [membership@w6sg.net](mailto:membership@w6sg.net) General Membership Meeting** is held on the first Friday of each month at Alto District Clubhouse at 27 Shell Road in Mill Valley, starting at 7:30 PM. Come a little early for pizza or whatever. From highway 101, head west toward Mill Valley on E. Blithedale. Turn right at the first stop light. Stay right at next stop sign, then turn left at next corner, Shell Road. We are in a two story building, second from the corner on the left directly under the power lines.

**Business/Board Meeting** meets at the Alto District Clubhouse in Mill Valley on the second Thursday at 7:30 PM. Members are encouraged to attend.

**Sunday morning informal meeting** (aka bible class) meets every Sunday morning at the Alto District Clubhouse in Mill Valley starting around 8am and runs to about 11am. Sometimes we even talk about radio.

**The Sunday Emergency nets.** The K6GWE emergency VHF net check-in is at 10:15 am on 147.700 (-pl 203.5). This is a directed net and the net control station may operate at the club house or at a member location. Members on the net check-in list that do not check in for three consecutive weeks are removed from the list until they reestablish check-in. Any member can sign up to act as the net control station. See the club website for signup instructions. The W6SG emergency HF net check-in is at 9 am on 3.915 Mh.

#### **Marin Amateur Radio Society Officers and Board Members:**

##### **President**

Curtis Ardourel WA6UDS 510-595-3494

##### **Vice President**

Kris Backenstose, KK6AYC

##### **Secretary**

David Chaney, AA6AE

##### **Treasurer:**

Ed Essick, K6ELE 456-1715

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Mitch Martin, WU1Q, 415-456-

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Tom Soskin, W6MTS

##### **Education Chair**

Randy Jenkins

Kris Backenstose Instruction Team Leader.

##### **VE Liaison**

Randy Jenkins

##### **Building Manager**

Doug Slusher

##### **Trustee for W6SG**

Mitch Martin WU1Q

##### **Trustee for K6GWE**

Doug Slusher KF6AKU

##### **Sunday Emergency Nets**

Mark Bruvry

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Rob Rowlands, NZ6J

Michael Fischer, K6MLF

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#### **HF Sunday Net Control**

Mike Ransom, AI6II

#### **VHF Sunday Net Control**

Steve Toquinto, KB6HOH