

Presidents Corner

It is June again... How did that happen? Of course in the world of amateur radio, June means Field Day, this year on the 22nd and 23rd, and we are once again partnering with the Redwood Empire DX Association for the event. We will once again be operating from the Marin Rod and Gun Club. We will be sharing their facilities with another organization so we need to be respectful of their space. Arrangements for getting into the club should be improved over last year. I am looking forward to a great event this year.

Our next regular meeting will be as scheduled on Friday 7 June, however the 5 July meeting is cancelled due to the proximity to Independence Day. You will find the club house empty and dark if you show up on the fifth. We have had some changes in the club board. Kris Backenstose N5HIT board member, past vice president and chair of our education team has resigned from the board and the education team due to lack of time to devote to maintaining the high standards which he insisted on meeting. His departure is a loss to the board, the education team and the club at large. I for one am sorry to see Kris go. I spent most of my working life as an independent contractor and that kind of work can eat up all your time. We are very fortunate in that Anthony "Skip" Fedanzo KJ6ARL has agreed to join the board to bring us back to complement. Skip came to us through public service events, first volunteering in 2014 and participating in 28 events. In 2015 he took the plunge and joined as a regular member. Skip has been contributing his time and energy to the club for a while and I am very pleased to welcome him to our board.

Continued on page 2

ARRL News

Treasurers Report

What's Happening In Radio

ARRL News

New Members

Public Service

Minutes

From the Editor

Ed Essick, K6ELE

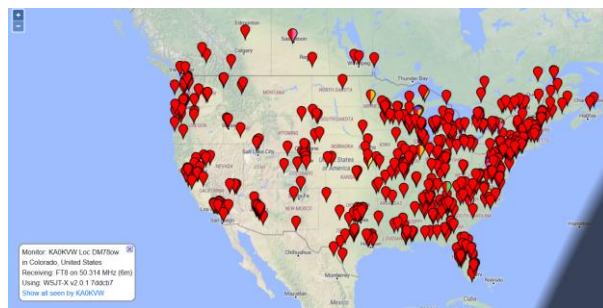
ARRL VHF Contest

This weekend is the ARRL June VHF contest. It is one contest I have not participated in before, mainly due to a lack of a suitable VHF antenna for 50MHz.

The goal of this contest is to work as many stations in the US & Canada in as many different Maidenhead grid squares as possible using frequencies above 50 MHz. A number of those who participate in this contest do so as rovers. A rover consists of no more than two operators that move among two or more grid squares during the course of a contest.

With the development of FT8 the VHF contests have attracted many more participants using this mode. Signals that can't be heard on the radio are copied easily by FT8 in many instances down to -23dB.

Here is a look at PSKreporter on FT8, 50.314MHz on 6/6 as this is being written. There are number of California stations using the mode. It is the start of the sporadic E season and possibly a number of these stations are taking advantage of an opening.



Come on out to Field Day this month to spend some time with our club members, operate, and have fun in a great location by the bay.

We are still in the process of finding a new chair for our education team and conducting a review of our current training process. We have been using a structure of multiple instructors, in class mentors, and a resequencing of the curriculum for three cycles now and it has worked well for us but with some experience we want to see what we can improve.

73 de wa6uds

What's Happening in Radio

ARRL June VHF Contest, 1800Z, Jun 8 to 0259Z, Jun 10
All Asian DX Contest, CW, 0000Z, Jun 15 to 2400Z, Jun 16

Ukrainian DX Classic RTTY Contest, 1200Z, Jun 15 to 1159Z, Jun 16

West Virginia QSO Party, 1600Z, Jun 15 to 0400Z, Jun 16

His Maj. King of Spain Contest, SSB 1200Z, Jun 22 to 1200Z, Jun 23

ARRL Field Day, 1800Z, Jun 22 to 2100Z, Jun 23



Cal will be back to cook for Field Day



Now that is concentration!



Beam me up Scotty



Our operating stations

How high is that antenna?



Free ticket to Field Day if you can identify this operator



Where are we going with this Beam?

New FT4 Beta Release "Leaps and Bounds" Better than Earlier Iterations

The *WSJT-X* Development Group released yet another new beta version of the FT4 protocol this week, and *WSJT-X* 2.1.0-rc7 is now available for testing. Developers point out that the FT4 included in this "release candidate 7" version is not compatible with any previous releases. A short mock contest session to wring out the contesting features of FT4 took place on June 4.



"Thanks to all who participated in yesterday's FT4 mock-contest practice session -- and especially to those who provided useful feedback. It is much appreciated!" said developer Joe Taylor, K1JT. "Everyone likes the 7.5-second T/R sequences, which provide operators with significantly more human interaction time than in previous revisions of FT4. Users also appreciated the sensitivity improvements and a larger range of acceptable time offsets (DT)." DT represents the combined clock difference for the transmitting and receiving computers, he explained.

Based on data compiled by Steve Franke, K9AN, Taylor said that it appears developers have the *WSJT-X* timing behavior under good control on all supported platforms, and the range of measured signal-to-noise values extended down to -21 dB.

"I operated for about 3 hours using 100 W and a dipole," Taylor recounted. "I copied transmissions from 263 unique call signs and made 143 QSOs in 29 states, 5 Canadian provinces, and 15 DXCCs."

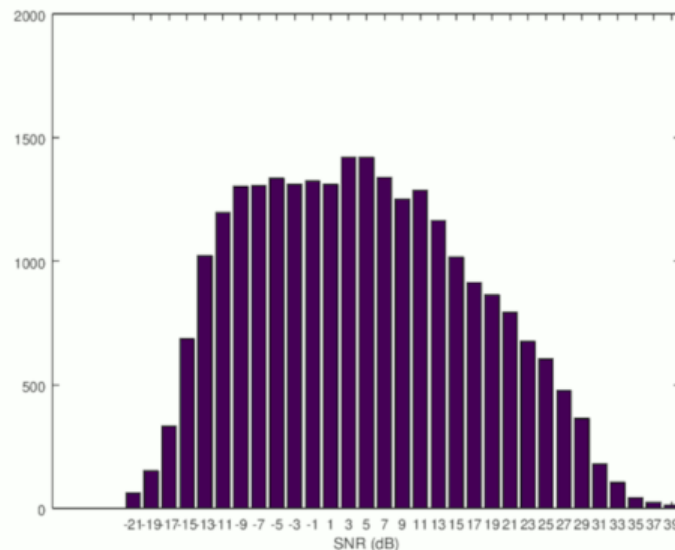
Taylor said the developers anticipate addressing all remaining issues they're aware of. "I believe we are on a good path toward a General Availability (GA) release of *WSJT-X* 2.1.0 by mid-July," he said.

"This new version of FT4 is leaps and bounds better than before," said Mike Black, W9MDB, in a June 4 post to the Yahoo [WSJT Meteor Scatter and Weak Signal Group](#). "I worked almost everybody I could see without any repeats. Seems like we have a winner here."

Changes, improvements, and bug fixes that have been made since *WSJT-X* 2.1.0-rc5 include:

- T/R sequence length increased from 6.0 to 7.5 seconds.
- Signal bandwidth decreased from 90 Hz to 80 Hz.
- Improved sensitivity: Threshold S/N is now -17.5 dB.

Release candidate *WSJT-X* 2.1.0-rc7 will be available for beta-testing through July 21, and it will *permanently* cease to function after that date. It will *not* be usable during the ARRL June VHF Contest or during ARRL Field Day. Taylor advised using *WSJT-X* 2.0.1 and FT8 for these events.



Steve Franke, K9AN, of the *WSJT-X* Development Group spent most of his time observing during the mock contest on June 4, decoding some 25,300 FT4 transmissions. This chart represents signal-to-noise ratios reported.

Reprinted with permission ARRL Newsletter 6/6/19

ARRL News

ARRL Invites Applications for Volunteer Monitor Positions

ARRL is now accepting applications from individuals interested in becoming part of the new Volunteer Monitor program, a joint undertaking of the FCC and ARRL. The program seeks volunteers who -- working under the direction of ARRL -- will monitor and survey the Amateur Radio bands both to detect improper activity and to recognize exemplary on-the-air behavior.

Prospective Volunteer Monitors must be ARRL members. They will undergo a training and certification program administered by ARRL, and will be vetted by ARRL through at least one oral interview and a preliminary evaluation by ARRL staff. Such requirements will continue for Volunteer Monitors once they are selected.

Volunteer Monitors will serve 3-year terms at the pleasure of ARRL, and ARRL will reserve the right to terminate the participation of any Volunteer Monitor for any reason.

Volunteer Monitors must be able to utilize state-of-the-art receiving equipment and to access no-cost remote receive sites, if requested. Applicants must possess strong writing and communication skills and an understanding of the importance of thorough documentation. They must have basic word processing and data entry skills and be able to send such information, including recordings, to ARRL electronically.

Applicants must have no history of warning letters or other enforcement-related action from the FCC, must hold a Technician or higher class license, and must have been licensed for at least 3 years.

Applicants should send applications to volunteer-monitor@arrl.org for processing.

In February, Riley Hollingsworth, K4ZDH, was named to oversee the development and implementation phases of the Volunteer Monitor program, which will replace the Official Observer (OO) program. Hollingsworth once handled Amateur Radio enforcement for the FCC.

Reprinted with permission ARRL Newsletter 5/23/19

Amazon Smile

Club members use this link when you shop at Amazon and we get 1/2% of your purchase.

Turn your Father's Day shopping into a force for good. Shop at smile.amazon.com/ch/68-0010718 and Amazon donates to Marin Amateur Radio Club.



Public Service

Miwok 100K

Awesome day yesterday! Thanks to you all for you're sometimes extended volunteer shifts.

We didn't lose anybody, thanks to close cooperation with the timing crew, Google sheets worked great to keep everyone up to date on DNS and DNF and the BRIDGEview Rest stop captain is over the moon about our support after the debacle last year.

We had challenges with the Tam West repeater again at Net Control and long suffering K6ETA sacrificed his Beemer crossband repeater much of the day at the Bolinas fire station to keep Net Control on the air. While the Google sheets roster was a success, Internet access to it at some aid stations was spotty, meaning a lot of voice traffic was still needed to reconcile drops. We will keep working to improve internet access for future events. Thanks to all for moving out of your comfort zones into new avenues such as Zello and Google sheets. Brian and Oliver helped enormously to lower barriers to our use!

The packet node experiment that K6ETA labored hours over was pretty successful, given that Steve was grounded at Bolinas much of the day! He had nodes at Bolinas, Bofax, Cardiac and Tennessee valley all talking to each other on 446.5 MHz simplex - too bad he didn't get a chance to use them in anger. His "BPQ" nodes are not your father's packet radio but advanced communications machines that we all need to understand better and be prepared to use in the future. A club presentation in the near future Steve?

Best regards,
Rob Rowlands NZ6J

Club House Gate and Fence Repairs

Mitch Martin and Ed Essick built and installed new gates at the club house over the past 2 weekends with the assistance from our helper Lazaro. Most of you remember the old fence and gate. Please be sure to set the gate pin in the new gates when you close them.



Mitch and helper working on new gates

Treasurer's Report

Marin Amateur Radio Club

BALANCE SHEET SUMMARY

As of May 31, 2019

	TOTAL
▼ ASSETS	
▼ Current Assets	
Bank Accounts	90,692.88
Other Current Assets	1,004.45
Total Current Assets	\$91,697.33
Fixed Assets	58,983.00
TOTAL ASSETS	\$150,680.33
▼ LIABILITIES AND EQUITY	
▼ Liabilities	
▼ Current Liabilities	
Accounts Payable	626.98
Total Current Liabilities	\$626.98
Total Liabilities	\$626.98
Equity	150,053.35
TOTAL LIABILITIES AND EQUITY	\$150,680.33

Marin Amateur Radio Club

PROFIT AND LOSS

May 2019

	TOTAL
▼ Income	
Donations	100.33
Rent	2,450.00
Total Income	\$2,550.33
GROSS PROFIT	\$2,550.33
▼ Expenses	
Reimbursable Expenses	435.29
Total Expenses	\$435.29
NET OPERATING INCOME	\$2,115.04
NET INCOME	\$2,115.04

Donations (All amounts included in General Account)

Building Fund	\$230
Club Station Fund	\$3160
General Fund	\$636
Public Service Fund	\$\$2,164
Repeater Fund	\$2,380

MINUTES GENERAL MEMBERSHIP MEETING

May 3, 2019

Held at: Clubhouse, 27 Shell Ave., Mill Valley, CA

1. Call to Order:

The meeting was called to order at 7:31 pm by Curtis Ardourel.

2. Introductions:

There were a total of 13 members and guests present. Board members and officers present: Curtis Ardourel WA6UDS, President and Milt Hyams KM6ASI, Secretary.

New members William Erb (KN6BIC) and William Bryan (KN6BIA) were introduced. Other new members were announced, but were not present: Atillo Mossi (W6CQC) ; Justin Mazzon (KN6BIF); and April French (KN6BID). The latter two new members plus Erb and Bryan were graduates of the MARS licensing class this year.

3. Adopt Agenda:

The agenda was adopted as presented.

4. Approve Minutes:

It was M/S/A that the minutes from the April 5, 2019, General Membership Meetings be approved.

5. Board Actions:

Curtis reported that new identification cards will be sent to all members in the very near future. These will also act as receipts to be left when members check out Club equipment for their use.

The Board has approved new construction projects for this year: The field strength meter, which was the subject of last month's Meeting presentation and a watt meter/dummy load. The parts for these projects have been ordered.

6. Fun with Ham Radio:

Jan Leja (WB6SPX) made a pitch for attending the project construction and radio repair sessions on Sunday mornings. In answering questions, Jan made it clear that most repair work was done on older rigs as the newer rigs require replacement of whole boards rather than parts and the boards are only available from manufacturers or dealers.

Member Antonis Papatsaras (AA6PP), who is also the President of the San Francisco Amateur Radio Club, announced that this coming weekend (5/4-5) is an HF contest weekend with several QSO parties being held throughout the country, particularly on the East Coast. It will be a great opportunity to make DX contacts on HF. He also invited MARS members to attend a SOTA hike scheduled for May 18th on Mt. Tamalpais. The hike will be to Middle Peak where a field HF station will be erected and contacts will be made.

In response to a question from the floor, Curtis announced that we will be installing a digipeater on Mt. Tam this summer. It will be a Fusion repeater with the capability for running both analog and digital, but will likely be run in digital mode only.

7. Secretary Report on External Communication:

Nothing to report.

8. Treasurer's Report:

The latest Treasurer's Report is in the latest QSA-5.

9. Committee and other Reports:

Membership : As of the close of business of May2nd, MARS had 116 members are current for 2019, 96% of 2018 membership. Potentially three more members are eligible for membership having passed the Technician exam after attending the MARS Technician License Course, whom Curtis will be contacting before the next meeting.

Public Service:

The Miwok 100 will be held tomorrow, which is requiring heavy participation by the Club.

Facilities:

Milt reported for Doug Slusher that significant clean-up has been made around the Club House in the past two weeks. Junk, which had been accumulating both inside and immediately outside the back garage door has been hauled to the dump and recyclers. Last Wednesday, Michael Fischer (K6MLF) put together a work party and hired a grounds keeper to remove the weeds and remaining debris in the back yard. He also put a cover on the Comm Van shelter. Well done Michael, et al.

Milt also reported that the Club had inherited from the estate of Dan Dufficy (KH8AF/SK) Dan's repeater network and equipment. Most of the equipment has been moved to the backroom where it will be sorted and stored. This equipment includes test equipment, including a service monitor, which has been locked up. Next Thursday, May 9th, the antennas at this home will be taken down by a contractor and he, Mitch (KU1Q) and Jerry (KA6BXV) will be on hand to take custody of his SteppIR HF antenna for the Club, for ultimate installation on the roof of the Club House. Milt announced that he has a 60 ft. tower available on Thursday for anyone interested. No one expressed any interest.

Education:

No report.

10. Old business:

None.

11. New business:

None.

12. Good of the order:

Nothing.

13. Adjournment:

It was moved, seconded and approved that the meeting be adjourned at 8:19 pm.

Presentation:

There was no presentation.

Respectfully submitted by

Milton Hyams, , Secretary, on May 4, 2019.

MINUTES

BOARD OF DIRECTORS MEETING

May 9, 2019

Held at: Clubhouse, 27 Shell Ave., Mill Valley, CA

Board members present: Curtis Ardourel WA6UDS, President; Mitch Martin WU1Q, Vice President; Ed Essick K6ELE, Treasurer; Milt Hyams KM6ASI, Secretary; and Marc Bruvry KF6VNT.

Absent: Tom Soskin W6MTS

Other attendees: K6GWE Trustee Doug Slusher KF6AKU; member Anthony (Skip) Fedanzo KJ6ARL and guest Adriana Rabkin, representing Marin VOAD.

14. Call to Order:

The meeting was called to order at 7:38 pm by Curtis Ardourel.

The agenda, as amended to add an item relating to the estate of Dan Dufficy (KH8AF), was adopted.

15. Approve minutes:

Minutes of the April 11, 2019, board meeting were approved without objection.

16. Secretary's Report (External Communications):

Nothing to report.

17. Treasurer's Report:

Ed Essick reported the Profit and Loss Statement, year to date, was as published in the latest QSA-5. He also reported that the rent was a couple of days late so the revenue figure was a little lower than it should be. There were no questions concerning the report.

Ed stated he needed a copy of the Articles of Incorporation to establish IRC 501c.3. non-profit status to banks to get CDs for investments. He hasn't been able to get them from Randy Jenkins. Doug will provide the required information.

18. Membership Chair Report:

Curtis reported that 116 members are current for 2019, 97% of 2018 membership. Three more graduates of the last Technician class are eligible for membership and Curtis is in the process of contacting them.

19. Education Chair:

There was no report from the Education Chair as Kris Backenstose has resigned from that position. Curtis indicated that he will meet with the instructors from the last Technician class to recruit a replacement, among other things concerning training and education for the coming year. A couple of individuals have expressed interest in the Chair position.

20. Facilities Chair:

Doug reported that MARS' neighbor Bruce has not provided the name of his painter as promised to date. His contractor friend Fred will come by to do the estimate inspection on the roof next week.

Another contractor is going to inspect the building for an estimate on roof repairs.

It was **M/S/A** to approve an operating budget of \$1000 for facilities maintenance and deposit that amount in the facilities account for repair and maintenance of the building and grounds to be expended at the discretion of the Facilities Manager. The Facilities Manager will provide an expenditure report and reconciliation of this account to the Treasurer at the end of each fiscal year. Requests for expenditures in excess of this amount or those rejected by the Facilities Manager may be submitted to the Board for approval.

Doug has obtained a proximity key lock system for the front door. He will meet with Tom Soskin to determine what needs to be done to the door mechanically to facilitate installation of the hardware. If it not appropriate, he will return the lock system and continue his search for one that will work.

21. Guest Presentation:

Member Skip Fedanzo introduced Adriana Rabkin who is a consultant/coordinator for Marin VOAD. Marin VOAD is part of a national organization that provides coordination between volunteer disaster preparedness and relief organizations. In Marin these include CERTs, Red Cross and faith based organizations, among others. VOAD assists in their collaboration and their responsibilities include matching available assets with needs in case of an emergency. They need assistance with communications between their sites in the event of an emergency. They are inviting us to attend a county-wide conference they are sponsoring on Tuesday, September 17, 2019, so that we might better learn how they operate in order to provide the communications support needed. Curtis committed to having one or more MARS representatives attend.

22. Old business:

a. Curtis announced that the signup and Pay Pal payment forms for the RF Detector Building Project will be loaded onto the website next week and participants will be limited to the first 10 signing up.

b. Curtis reported that the new club ID cards, which will also serve as a receipt for any equipment borrowed from the Club's new lending library of equipment, will include a QR code containing a unique ID code. This will prevent using a counterfeit or expired card to check out equipment. These cards will be sent out to members very soon.

c. This coming dues billing cycle will be by "in-person" (paper) bills which will include solicitations for voluntary contribution for various club funds, including scholarships, in a format which has been circulated for comment. These bills will also include a list of opportunities for members to volunteer for activities in support of the club to include license training instructors.

d. Curtis contacted an administrator for the Tamalpais Union High School District regarding our willingness to provide scholarships for students interested in amateur radio. He is waiting for them to get back to him with more details.

23. New business:

a. Michael Fischer K6MLF, requested that MARS establish a CommTruck Committee to assume responsibility for all of the maintenance of the club's comm truck. It was **M/S/A** that a CommTruck Committee be established with the responsibility for cleaning, maintenance, improvement of radio systems and DMV licensing of the MARS Comm Truck, which shall also propose and manage an annual budget for this purpose. Upon approval, Michael Fischer was appointed Chair of this committee.

b. It was reported that the \$150 bill for landscape clean-up in the back of the clubhouse has been paid, so no further action is required.

c. Curtis reported that Kris Backenstose has resigned from the Board effective with this meeting. This vacancy on the Board has made it more difficult to obtain a quorum at Board meetings in the event of absences. Upon nomination from the floor, it was **M/S/A** that Skip Fedanzo be appointed to complete the remainder of the Board membership term of Kris Backenstose. Welcome to the Board, Skip!

d. Mitch Martin and Marc Bruvry were appointed to represent MARS at the Field Day coordination meeting to be held at the Marin Rod and Gun Club on Saturday, May 18, 2019. Curtis will provide them with details on the meeting.

e. Milt reported that Dan Dufficy requested that he(Milt) and another ham friend of his (Bob Schwartz) assist his sister, Meg Dufficy, in the disposition of his amateur radio equipment and networks upon his death. Milt was contacted by Meg, executor of Dan's estate, after his death concerning this request. According to that request, Milt reported the following actions were taken:

1. Dan's ham shack and equipment, including considerable repeater and control hardware, were dismantled and removed from his home, most of the contents of which has been donated to the club and is currently stored in the rear of the club house. Some significant items such as test equipment and transceivers are locked in the cabinets. His antenna tower antennas were removed earlier today with the very capable assistance of Mitch Martin, Jerry Foster and Mel Nunes and the antennas, including a SteppIR, will be delivered to the clubhouse on Friday.

2. Dan had an extensive UHF repeater network throughout the state including repeater sites co-located with those of MARS at San Pedro Ridge and Big Rock as well as one on Grizzly Peak above Berkeley. These three are managed by C & C Equipment Company who advised Meg Dufficy that they should be shut down and the equipment removed. After consultation, Doug

Slusher wrote C & C a letter advising them that MARS had inherited Dan's equipment at each of these sites and it was our intention to continue their operation under the K6GWE trusteeship. It was **M/S/A** that club accept the donation of Dan Dufficy's UHF network sites at Big Rock, San Pedro Ridge and Grizzly Peak, and that the actions taken by Milt and Doug be ratified and that all further necessary actions be taken to complete the appropriate lease and other paperwork to perfect MARS' interest in Dan's Big Rock, San Pedro Ridge and Grizzly Peak sites and to effect that change with NARCC.

3. The Board expressed doubts as to whether it would be appropriate for MARS to assume responsibility for Dan's Vaca Mountain repeater site as it is too remote for MARS core interests. It was **M/S/A** that Milt explore the possible dispositions for that site to include offering it to MDARC or Bob Schwartz for their exclusive ownership and use, and report back concerning a recommended disposition.

4. Pending sorting and inventory of all equipment donated by Dan to the club, no disposition of his equipment shall be made without the approval of this Board and it shall be safeguarded pending that determination.

24. Good of the order:

Milt will put together a recommendation for an improved work area in the rear of the club house and submit it to the Board for approval and action.

25. Executive Session:

None.

26. Adjournment: Meeting adjourned at 9:48 pm

Respectfully submitted by

Milton Hyams

Secretary, on May 10, 2019

Marin Amateur Radio Society W6SG.NET, 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 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.

<p>Marin Amateur Radio Society Officers and Board Members:</p> <p>President Curtis Ardourel, WA6UDS</p> <p>Vice President Mitch Martin, WU1Q</p> <p>Secretary Milt Hyams, KM6ASI</p> <p>Treasurer: Ed Essick, K6ELE</p> <p>Board Members Curtis Ardourel, WA6UDS, 510-290-6069 Milt Hyams, KM6ASI, 415453-3867 Skip Fedanzo Marc Bruvry, KF6VNT 492-9292 Ed Essick, K6ELE, 415-456-1715 Mitch Martin, WU1Q Tom Soskin, W6MTS, 415-342-2372</p> <p>Other Positions:</p> <p>Education Chair Randy Jenkins Kris Backenstose Instruction Team Leader.</p> <p>VE Liaison Grant Pritchard</p> <p>Building Manager Doug Slusher</p> <p>Trustee for W6SG Mitch Martin, WU1Q</p> <p>Trustee for K6GWE Doug Slusher KF6AKU</p> <p>Sunday Emergency Nets Mark Bruvry</p> <p>DX Representative of ARRL Jerry Foster WA6BXV 892-3829</p>	<p>Public Service Event Coordinators Michael Fischer, K6MKLF Randy Jenkins KA6BQF Rob Rowlands, NZ6J Larry Bradley KK6QPE</p> <p>Membership Curtis Ardourel, WA6UDS</p> <p>Editor of QSA5 Ed Essick, K6ELE e.essick@comcast.net</p> <p>ARRL San Francisco Section Manager Bill Hillendahl KH6GJV@ARRL.ORG</p> <p>WEBMASTER Curtis Ardourel, WA6UDS</p> <p>HF Sunday Net Control Mark Bruvry, KF6VNT</p> <p>VHF Sunday Net Control Steve Toquinto, KB6HOH</p>
---	---