

**Columbia Amateur Radio Club**  
**Minutes for the August 5, 2019, Meeting**

President Dan Cunningham welcomed everyone to the meeting. Many had been able to attend the meet and greet at California Dreaming before the meeting started.

Two changes in leadership were announced. Michelle Frady has resigned as Secretary. Demands and travel for her new job have made attendance at the meetings impossible for her. Her services as secretary are greatly appreciated. Gary Anderson has stepped down as the 2 Meter Net Manager. He has served for a number of years and has done an excellent job. Charles McKinnis will take over Gary's job immediately, including scheduling net controllers for the Sunday and Wednesday night nets

As of the end of July, the club had 146 members, including 4 new members and 18 family members. The bank balance headed into August was \$2,476.37

For the month of May, there were nine 2-Meter nets with 288 check ins and 31 announcements.

The presentation that evening was done by our new Net Manager, Charles McKinnis. Charles demonstrated the use of design software and some chemical processes that could be done at home to construct circuit boards. Charles showed how the design from the CAD program could be used to print the pattern of the traces which were then used to mask the copper on a small copper-clad, fiberglass board. An acidic solution was used to etch the exposed copper away, leaving only the copper traces. Charles provided his presentation to Pete Emmel, who posted the details to W4CAE.com.

Everyone was reminded that the next club meeting will be on Labor Day. Because the ETV building will be closed, the meeting will take place at the American Red Cross Building in Columbia. The meet and greet will again be at California Dreaming, and the club meeting at Red Cross will start at 7 pm