# Mountain Amateur Radio Club

## **Minutes of the Meeting**

### 17 September 2025

Our MARC meeting began at 1901, with Dean Buckhouse presiding. Intros around the room. No SK's noted.

Previous meeting minutes were discussed and voted on.

Treasurer's report was given by Deb. 2478.32 in general account. 292.43 in VE.

Springs Link. Money spent will be turned into OEM for reimbursement.

Next VE session Nov 1.

Roach and Dragon Fly. We will offer 1K plus \$500 dollar tax donation.

Program. Ray here tonight.

Snacks. Victor in October

Officer elections. As defined. Motion and passed.

Meeting Adjourned at 1920.

9 members, 2 guests, none on zoom

Submitted by Bill Wallick

# **MARC General**

## Quick recap

The meeting was called to order by Dean KDOVBA, who led discussions on meeting notes, financial reports, and VE session updates. Officer elections were conducted with candidates being elected by acclamation, followed by technical discussions about repeaters and dB calculations in radio communications. The conversation ended with educational presentations on decibels, their applications in radio communications, and S-meter operations, with plans for future technical discussions.

#### Next steps

- Marc to contact Michelle Bowley at Tower County OEM to submit receipts for potential reimbursement on the spring blink expenses.
- Marc to negotiate with Wes and Carol on purchasing the roach and dragonfly equipment, offering \$1,000 for both with a \$500 tax deduction voucher.
- Marc to organize a trip to the Badger site to conduct inventory and complete the cache.
- Victor to work on the D-sharp project when family commitments allow.
- Ray to potentially present a follow-up talk in October about S-meters and receivers.

## Summary

### Meeting Minutes and Leadership Updates

The meeting was called to order by Dean, KD0VBA, who introduced himself as the president and led the meeting. The group discussed the complexity of recent meeting notes, which included AI-generated content, and mentioned that August meeting minutes were sent out. No reports were provided by the vice president or secretary, and there were no personal awards or recognitions to announce. The minutes from the previous meeting were approved without any corrections.

### Financial and VE Session Updates

MARC presented the August financial report, highlighting community checking account

transactions and a refund for the Pikes Peak regional OEM event. He discussed a failed VE session in September where one candidate, a search and rescue volunteer, did not pass due to studying outdated material from 2017-2022, and mentioned plans for the next VE session on November 1st at the county sheriff's office. MARC also noted that he would submit receipts to Michelle Bowley at Tower County OEM for potential reimbursement of radio equipment costs.

#### **Negotiation and Technical Issues Update**

The group discussed negotiating the purchase of two items, a roach and a dragonfly, from Wes and Carol, with a proposed offer of \$1,000 for both plus a \$500 tax deduction voucher. Marc planned to visit the Badger site to conduct an inventory and investigate ongoing howling issues on the repeater. The group also addressed technical issues with repeaters, including output tones and squelch problems with certain vehicles. Anna was mentioned as handling net manager duties and programming upcoming meetings, with a request for additional help with programming.

#### Officer Elections and Acclamation

The meeting focused on officer elections, with Marc announcing the current candidates: Jeff for president, Danny for vice president, Marc for secretary, Deb for treasurer, and Victor for a board slot. Marc encouraged volunteers for president but received no additional nominations. The officers were elected by acclamation, and Marc moved to end the formal portion of the meeting. The conversation ended with Marc introducing Ray to the group.

#### **Understanding Decibels in Engineering**

MARC discussed the concept of decibels and their importance in understanding power relationships, particularly in the context of radio and engineering. He explained that decibels are often misunderstood, even by manufacturers and engineers, and emphasized the need for clear understanding of this unit, which is a smaller unit than a bel. Marc also mentioned preparing a PowerPoint presentation for an upcoming meeting, which would require a keyboard and mouse.

#### Understanding Decibels in Ham Radio

MARC explained the concept of decibels as a logarithmic measure of the ratio of two power levels, emphasizing its application in various areas of ham radio, including amplifier gain, antenna gain, and path loss. He highlighted the inverse square law, which states that doubling the distance reduces power by 6 dB, and discussed the use of decibels to simplify calculations involving very large or small numbers. MARC also described the effective radiated power of a focused antenna, comparing it to an isotropic radiator, and mentioned upcoming moonbounce activities.

#### dB Calculations in Radio Communications

MARC led a discussion on dB (decibel) calculations and their practical applications in radio communications. He explained the basic concepts of dB gain and loss, using simple examples to demonstrate how dB values relate to power changes. MARC walked participants through various calculations, emphasizing the importance of understanding how dB values increase and decrease by factors of 2. He also discussed the significance of these concepts in radio operations, particularly in relation to antenna performance and signal strength.

#### **Understanding Decibels in Radio Communications**

MARC discussed the concept of decibels (dB) and its application in radio communications, explaining how dB is used to express ratios of power, voltage, or intensity. He explained the logarithmic scale of dB, which allows for the expression of large numbers in a more manageable form, and provided examples to illustrate how dB is calculated and used in different contexts. MARC also touched on the concept of isotropic radiators and dipole antennas, explaining the theoretical differences in gain and how these are referenced in antenna measurements.

#### S-meter and Receiver Operations Overview

MARC discussed the concept of S-meter and receiver operations, explaining how estimators interpret signals and compare them to antenna noise, noting that these skills are particularly relevant for understanding Asian communication patterns. He mentioned a future talk scheduled for October that would delve deeper into these topics. The conversation also touched on recent interactions in Brazil and some technical challenges related to Mars communication, though specific details were not fully elaborated.