

LV Mesh Group 1st Quarter 2026 Breakfast Minutes

The breakfast was held at Winchell's Pub & Grill, 199 E Warm Springs Rd, Las Vegas, NV 89119 on January 3, 2026.

The following amateur radio operators were present: Rick Lautenbach (K7FYI), Peter Filiberti (KF7PSM), Charlie Kunz (AA5QJ), Frank Kostelac (N7ZEV), Bob Nelaon (WA3PAD), Gene Heiter (N7WDZ), Paul Scott (N9XCW), James Berends (KK7OUG), Tom Davis (KB7HTA), Steve Farinella (N6SFX), Blayne Ence (KG7SS) and Robert Ambrose (N7GET); a new record for attendance!

First, a big thank you to everyone for attending today's breakfast; it was the biggest crowd we have had in quite a while, with a large agenda and a lot of moving parts! Here goes...

Tom/Dale and Rick agreed to test a link between them at some point in the future. If we can get past some trees, there is a path between us. Modeling shows that we'd squeeze just north of the Westgate Hotel and South of the Stratosphere... essentially over the Westgate parking garage.

As suggested by Rick, Frank will experiment with his Red Mountain link by setting those two nodes to a 20 MHz band width. Also, setting the Red Mountain dish to PtMP and the one at his QTH to Mesh Station, should greatly increase throughput.

As suggested by Rick, Tom and Steve will work with Wayne and Eric to get the Blue Diamond mesh relay site into a more useful condition. The difference in azimuth between the Red Mountain LVW dish pointing and the Blue Diamond site is only about 2 degrees, so a good connection to Red is possible. It seems that Blue Diamond is a great site for the southwest valley, but it isn't well connected presently and it is under-utilized.

The group agreed that IF we could get a single sector node on Potosi to serve everyone in the valley well, then replacing the other sector node with a dish connected to Frank's relay site at a band width of 20 MHz or higher, would be advantageous.

The group felt a good goal would be to change out all the old Ubiquiti Rocket M5 nodes for the newer [R5AC-Lite](#) (see note) radios where possible. The newer radios would give us better overall performance. Tom mentioned installing the new firmware can be tricky, so talk to him before you order. Don't forget to check Ebay for good deals.

Moapa Valley Amateur Radio Club (MVARC) news: Dieter reports they have a mesh transmitter pointed at West Mountain in Utah, but the Dixie ARC still hasn't installed their

side. Some people (Dennis) in Mesquite have interest, but because of Flat Top Mesa, they are shadowed from Beacon Hill, but can see West Mtn.

Frank, Bob and Charlie will work on doing an AREDN mesh presentation at the upcoming Nevada Emergency Preparedness Association convention at Palace Station on February 10/11. They will make every effort to WOW their audience. Thoughts are to set up equipment on Monday the 9th with a couple of nodes, camera, Team Talk and maybe a tunnel to connect the rest of the LV Mesh Network.

Rick has developed some great software to quantify our networks' viability. He will continue to use that software, develop additional software and do testing on our network. Using this information, he will assist Richard in developing a band plan for the valley.

Tom has a new Raspberry Pi 4 Team Talk Server kb7hta-teamtalk. Frank has a backup server n7zev-teamtalk. For Sunday night NETs kb7hta-teamtalk.local.mesh is the primary with n7zev-teamtalk.local.mesh being the secondary server.

Everyone agrees there is a need to upgrade the nodes to the latest software. At some point, not sure when, we will not be able to see/connect to the nodes that do not have updated software.

Everyone agrees there is a need to visit each relay site for many reasons see table below.

Site	Current Equipment	Future Equipment	Planning
Potosi	2 x 90° Sector RM5 1 x Network Switch 1 x Fisheye Camera 1 x Camera	1 x 90° Sector 5AC Lite 1 x Dish 5AC Lite or PB 1 x Network Switch 2 x Camera	Frank, Bob & Paul
Red Mountain	2 x 90° Sector RM5 2 x Dish RM5 1 x Switch GS108e 1 x Sercom Camera 1 x PTZ Camera	2 x 90° Sector 5AC Lite 2 x Dish 5AC Lite 1 x Switch 5AC Lite 1 x Sercom Camera 1 x PTZ Camera	Rick & Steve
Angel Peak	1 x 90° Sector RM5 1 x Omni RM5 1 x Dish RM5 1 x Switch GS108e 1 x Sercom Camera 1 x PTZ Camera	1 x 90° Sector 5AC Lite 1 x Omni 5AC Lite 1 x Dish 5AC Lite 1 x Switch GS108e 1 x Sercom Camera 1 x PTZ Camera	Tom & Charlie
Blue Diamond	1 x 90° Sector RM5 ?	1 x 90° Sector 5AC Lite 1 x Dish 5AC Lite or PB 1 x Network Switch	Wayne & Eric

Note1: The [airMAX Rocket AC Lite](#) (R5AC-LITE) is significantly newer and faster than the [Rocket M5](#), offering 802.11ac (Wi-Fi 5) technology with lower overhead, better processors, and higher modulation (256QAM) for much higher real-world speeds (500+ Mbps) compared to the M5's older 802.11n (MIMO) tech (150+ Mbps), making the AC Lite superior for modern, high-throughput Point-to-Point (PtMP) or Point-to-Multipoint (PtMP) links, especially in noisy environments, while the M5 is an older, budget option for basic links.

Note2: Even though the network switches perform well for the most part, there was some discussion about changing the network switches out for a different manufacturer/type.

Note3: There was some discussion about changing to cameras that don't require Internet Explorer.