

Minutes of the Business Meeting of the Forsyth Amateur Radio Club - 17 September 2018

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1. Call to Order and Welcome: The monthly Board of Directors Business Meeting, Forsyth Amateur Radio Club, was held on Monday, 17 September 2018 at Sixty Six Pizzeria, 3440 Frontis St, Winston Salem. The meeting was called to order by FARC President David Shoaf, K4CX, at 1906 hours, welcoming all meeting attendees.

2. Meeting Attendees: A partial list of the meeting attendees (approximately 23) is as follows: Steve Mierisch KG4JWU, Jerry Minor K4GW, Kent Englebert K4HKE, Geoff Rudy KK4MOV, Mike Atkins N4VE, Jim Register KV4SJ, Stacey MacArthur W1LLO, Mary McClellan KM4WPO, Ian MacArthur W4STH, Cathey Bowman KB4TKO, Gene Bowman WB4MSG, Dale Mierisch WB9SZL, Michael Pope K4OLD, Steve Patterson WA3RTC, Bob McClellan W3AVB, Harold Richardson N4HER, David Shoaf KC4X, Harlan Cobert W1HRC.

3. Surplus antenna: The club has a surplus antenna that needs a new wiring harness. As Mike Atkins, N4VE, has been storing it at his shop for a number of years, Jerry Minor, K4GW, offered to purchase it for \$100 and it will be his to repair. Harold Richardson, N4HER moved to proceed with the sale and Harlan Cobert, W1HRC seconded the motion, which passed unanimously.

4. Nominating Committee: Don Edwards, WS4NC, having been unexpectedly swamped with other issues, has turned over chairmanship of the nominating committee to Harold Richardson, N4HER. Harold has asked for a little more time to select a nominee for the fourth board member. The committee is still on schedule, according to the old bylaws, to complete everything in time for the elections.

5. Bylaws: The proposed bylaws have gone out to the committee and the club officers. The bylaws will be presented to the club at the October meeting, to be voted on in November.

6. AUXCOMM/ARES: Harlan Cobert, W1HRC, reported on the ARES/AUXCOMM activities.
Hurricane Florence:

- Stood up a nightly net on 145.47, moved it to 147.315 when issues arose on the 47 repeater.
- Had 39 folks supporting the effort, putting in 220 man hours, on the AUXCOMM net or other activities.
- Ran brief nets starting at 8pm every night from Tuesday through Sunday
- Had enough staff to field three 2-person EOC teams and fifteen mobile units after Stacey MacArthur, W1LLO, and Nick Gibietis, KN4ACT, stepped up and got a crash course on WebEOC.
- Identified that we need more people who are EOC trained and EOC COMM lead trained. Harlan had to turn down a deployment for the state IMT efforts because without him, we didn't have enough personnel trained to be EOC COMM lead to complete the three teams; Jim Mansfield, WA4NOT, is qualified but was medically unavailable.
- Dale, WB9SZL, reprogrammed the repeater to periodically announce the active AUXCOMM mode, and gave each mode a unique squelch tail beep pattern.

- If you didn't get email storm status updates from Harlan, he either doesn't have a Form 98 from you or there is a problem with the email address.

Tour To Tanglewood:

- Coming up this weekend
- Saturday - Minimally staffed
- Sunday - Still need three to four ham operators to support rest stops. Exploring re-assigning operators from the rest stops that close first to the last rest stops to come active.
- Route info available on Ride with GPS.
- Will use Life360 again this year for tracking SAG, Shadow and Operator locations. The periodic pinging will run the cellphone battery down quickly, so it is important to keep your phone on charge in your vehicle during the event.
- There will be a mandatory conference call at 6 pm Wednesday for all AUXCOMM members supporting the event.
- Thursday AUXCOMM net at 8:00 pm will run a little longer to cover use of tactical call signs.

ECOMM Net Controller Course: - Nov 10 8:00 am - 4:30 pm put on through the AUXCOMM system, introduces you to all the ICS forms for interfacing downtown or in a mobile command setting. This is the manual system, not WebEOC. This is step 1 of becoming a COMM leader down at the EOC.

EOC Field Trip: Once we get through Florence, will set up for AUXCOMM members to go as a group to the EOC downtown and get familiar with the location and our configuration and connection points.

EOC Antenna Status: The two 2m/70cm antennas are mounted on the same mast about eight inches apart and will have to be reinstalled with some reasonable separation. The HF dipole is surrounded by steel and will also need to be reinstalled properly.

7. Vagabond Website: Harlan Cobert, W1HRC, announced that John Steinberger, W8LWX, who has graciously hosted the Vagabond website for years, will be retiring his hosting account and websites, and the Vagabonds will need a new web host. Harlan asked if the club could provide some space for a simple page for the Vagabonds. There being no objections, David Shoaf, KC4X, ~~asked~~ voluntold Stacey MacArthur, W1LLO, and Jim Register, KV4SJ, to work to get a static page together and proposed we talk to our webmaster, Terry Brown, AK4D, to get that up on a temporary basis. Jerry Minor, K4GW, offered to look for a free hosting site for the Vagabonds.

8. Project Group meeting: Steve Patterson, WA3RTC, announced that Tuesday's project meeting was cancelled due to hurricane Florence.

9. Repeater Report: Dale Mierisch, WB9SZL, gave an update on the repeater work and current status.

145.47 Repeater Status:

Dale Mierisch, WB9SZL, reported that he had resolved the recent kerchunking and buzzing we have been hearing on the .47 repeater. Dale explained that, after a power failure at the repeater site, the repeater comes up in a failsafe mode where all of the filters and PL tone settings are disabled. The repeater occasionally hears low level signals intended for repeaters in South Carolina and Virginia, but ignores them because they have the wrong PL tone. The propagation conditions also brought us the interfering signals causing the buzzing. Without the PL tones and filters, the repeater was triggering

whenever the signal was strong enough to break squelch. Dale went into the machine remotely and re-enabled the PL tones and filters, resolving those issues.

Jerry Minor, K4GW, spoke with the site owner about the generator. The site owner stated he purchased a replacement starter for the generator and commented about a broken casting on the starter. It is unclear whether the comment applied to the original or the replacement starter.

Jerry also reported there has evidently been a lightning strike at the tower somewhere above the 170 foot level where our antenna is mounted. We may have some as yet unrecognized damage, since a system with an antenna mounted above ours apparently took significant damage and Jerry's receiver, with an antenna well below ours, isn't working very well either.

Harold Richardson, N4HER, mentioned that during his drive to the Shelby hamfest, he heard the repeater's time announcement truncated on occasion. Instead of hearing "the time is 3 pm" the announcement might be "the time is 3 p". Dale had two theories. One was that it was before he re-enabled the filters and some intermod was getting in and cutting off the announcement. The other possibility is a known issue with the repeater controllers - occasionally the voice buffer doesn't get completely initialized, and whatever trash is left over in there can cause issues.

146.64 Repeater Status:

The .64 machine range has been improved, but we're not out of the woods yet.

We have several interfering signals at the repeater site, one being the CPU clock in the repeater controller. Opening up the controller and reseating the grounds reduced the signal to a much lower level, but some toroids may be needed to eliminate all interference from that source. Another possible source of interference is a powerful paging system located nearby; the antennas for the two systems are on opposite corners of the penthouse roof. This requires more study.

We suspect the original hardline may have been damaged due to construction which has also made a large portion of it inaccessible, so we have installed a new hardline up to the antenna location via a different path. At that time, we tested using a separate receive antenna on one of the hardline runs with poor results. The antenna was a spare belonging to David Shoaf, KC4X, and had previously been painted black, which, according to Harold, N4HER, should only be done with vegetable-based paints. Nowadays, many paints/pigments are metal-based and will interfere with antenna operation.

David reported finding an antenna similar to those installed at the EOC down at the Shelby hamfest. He purchased it for the club for \$40 and has been reimbursed.

When time permits, we plan to try some different configurations to see what works best there. With the 2m and 440 repeaters there, we could run separate antennas for transmit and receive or one antenna per repeater.

444.275 Repeater Status:

This repeater system, co-located with and currently using the same hardline and dual-band antenna as the .64 machine, is quite deaf. Right now, you have to get in front of the hospital to key it. We suspect the same problem is affecting both repeaters, and are focusing repair efforts on the .64 machine at this time.

10. Yaesu DR1-X Fusion repeater trade-up offer: Jerry Minor, K4GW, brought up the upgrade possibility. He reported speaking to Hans at Yaesu who is managing the offer. Apparently the offer to upgrade from the DR1-X to DR2-X repeater has officially expired, but Hans is still evaluating applications from clubs on a case by case basis.

Dale, WB9SZL, gave a brief history: The club owns two of the DR1-X repeaters, the first bought for \$500 and the second for \$600, back when Yaesu was doing a special offer for clubs to get the new DR1-X units, normally about \$1800, out into the market. Yaesu ran an offer from January to June of this year to trade up to the new DR2-X units for about \$300 each. The offer expired before we could take advantage of it, but it looks like we can still try.

The DR1-X Fusion is a dual-band mixed analog/digital mode repeater, intended to support either mode or translate between modes. There were firmware issues that prevented the combined modes from working well. Yaesu has firmware upgrades that provide some fixes and enhancements, but not everything. The new DR2-X repeaters have dual transmitters and dual receivers so the repeater can cross-link with other repeaters in an emergency situation. The dual receivers also allow the repeater manager to control the repeater while it is in use.

If we decide that we really don't like the repeater, we can sell it. There is a restriction on selling the unit if purchased under this deal - the repeater must be installed at the site, and you must wait for a year before selling it.

Financials: This is a trade-up program - you send the old repeater (our average purchase price \$550) and \$300, and receive a brand new \$1,800 repeater in exchange. There is a version with LAN connectivity for a \$500 upgrade price, but it is unclear whether we would need that. Dale also mentioned there are likely to be shipping charges.

Harold, N4HER, asked how much money we had; Kent Englebert, K4HKE, did a quick sum and came up with \$3,963. Kent reminded us that between the antennas, new site locations, tower climbs, etc., the lion's share of our spending this year has been on repeaters. On the other hand, they are a major part of our emergency response capability, they haven't had a lot of maintenance the past few years, and a large part of the expense was due to the relocation away from the top of Sauratown Mountain.

Harold Richardson, N4HER, moved that we authorize Dale to look into the offer, and to go ahead and make the deal for both units if he deems it is time sensitive. There were multiple seconds, and the motion was unanimously approved.

11. Donations to the club: Geoff Rudy, KK4MOV, met with a gentleman whose father had been a club member, a Vagabond, a teacher and a scoutmaster. After the gentleman passed in 2000, his widow preserved his ham shack untouched until her recent death. The son would prefer for the equipment to be used for a training setup, perhaps a working station with a memorial plaque. He would like a formal proposal from us as to what we would do with the equipment, which he will then take to his brother for his approval. Geoff passed around pictures of the gear, which includes an old Swan 350 and a fairly modern looking Ten-Tec unit. Geoff asked for ideas for the proposal. Some discussion occurred, but nothing was decided.

Harold, N4HER, mentioned he had been approached by a gentleman wanting to donate printers he had in storage to some worthy organizations. Harlan, W1HRC, mentioned it would be nice for AUXCOMM to

have a portable one that could be taken to the EOC when they are activated. Harold will get back with the donor and work with him.

12. Adjournment of Meeting: Motion to adjourn the meeting was made, seconded and meeting was adjourned at 2026 hours.