

## Tech Report

- 76 is our Flagship repeater and it has to work
- Worcester 76 failed last winter – voter and link issues
- Valley Forge worked but not well and got worse
- Found bad feed and antenna on VF 76
- Replaced feedline (donated and installed by Tim Eichelman)
- Replaced shorted Stationmaster with new G7
- Started and finished site cleanup: inside, side compartment, and back
  - Old repeaters and donated junk
  - About 22 broken and destroyed antennas
  - 5 truckloads hauled out by Al KA3ODI
  - And we got paid for the junk
- Obtained dedicated computer and LCD monitor for VF site for programming the Fusion controller and Kenwood repeater – can later be used there for the MESH project (donation from Tom W3EX)
- Got the Henry amp up to power 100 watts after the antenna was fixed, then several weeks later, it started spilling out noise, locking up the repeater – 76 is presently barefoot at 30 watts
- I ordered a new amp from and recommended by Jeff Depolo – It's a Cresend Commercial amp that will go to VF – the Henry will go to Worcester when repaired
- Got new rack mount power supply capable of backup battery operation
- Got new deep cell battery and connected it – 76 now has battery backup
- The repeater, amp, and new power supply were put into its own 9U rack
- Ceiling has some new tiles – helps with extreme cold and heat
- The shed at VF is in bad shape – rotted T111 panels – big hole in back – temp patch
- Replaced several locked hinges
- Ready to replace the worst door – has poorly patched hole – just need some physical help
- Plan: to put 7 new T111 panels on top of old so we don't have to lose insulation & trim
- Roof next – plan is to patch just the leaks
- 3 more doors need replacing (3 T111 panels needed)
- Ends of shed not so bad – I already painted one end
- Air Conditioner bad, needs replacing. Promise of donation?
- Electric service wires were at ground level – temporarily now up a bit higher – conduit was obtained to deal with this over 20 years ago and never completed – was hung on back of shed
- Plan: going to trench underground 18 feet to electric service box and run 30 ft new 8-3+G cable
- 443 Fusion repeater antenna system checked out great – repeater is up and running but users are requesting an amplifier
- 224 repeater antenna has 10-1 SWR – needs replacing – is any body using this?
- There is no Control receiver at Valley Forge. Telephone lines were discontinued 20+ years ago - I have tested 4 G MIFI at the site and the service is terrible
- I have just obtained a new receiver to get some control for just under \$31
- 6 meters is up and running only with the local VF receiver - Boyertown site needs attention
- Worcester Site: 76 site with voter and 223 repeater
  - Voter needs some work and links need some work
  - Links are believed to be working at Eagleville, Camden, and Sellersville
  - Site wiring is a disaster according to Ron K3ZKO
    - 223 is up and running

94 is up and running in Media – working very well

82 is up and running

## Tech Report Discussion

### Junk

Any questions?

Thanks again to Al

Need to do this at Worcester but it's not near as bad {old batteries}

### New Amp (Cresend)

Waiting for Jeff – its brand new at \$650 ( List price at \$1400)

I ordered it because we need it and one was approved for Worcester and VF is more important

### Henry Amp

Jeff might look at it is he finds time, otherwise it:

Needs to be packed and shipped (est \$55)

Hopefully the repair cost is reasonable

### 224 Antenna

Is any body using it

Cost \$210 from HRO

Will need to be installed

Will need a climber

Spring?

### 443 Amp for Fusion

Approval ?

Cresend from Jeff or something else

### Shed – Help needed on repairs – installing T111

Who?

When? Back should be before winter weather sets in

Door – one a priority

### Worcester Site Wiring

Ron And ?

Labeling biggest problem

Voter PS

Test Link receivers

### Electrical

Who? I will trench the conduit if no one else will but I want someone with me

I can do everything except the tie in to the service

I am hoping to get Dave N3KKL to tie in for us

### Control

I am working on it

### Heat for Shed for Work Party

I am donating a portable propane heater that will be left there

Only used while we are there

### Other Technical Questions?