

K3AWS

D-Star Day

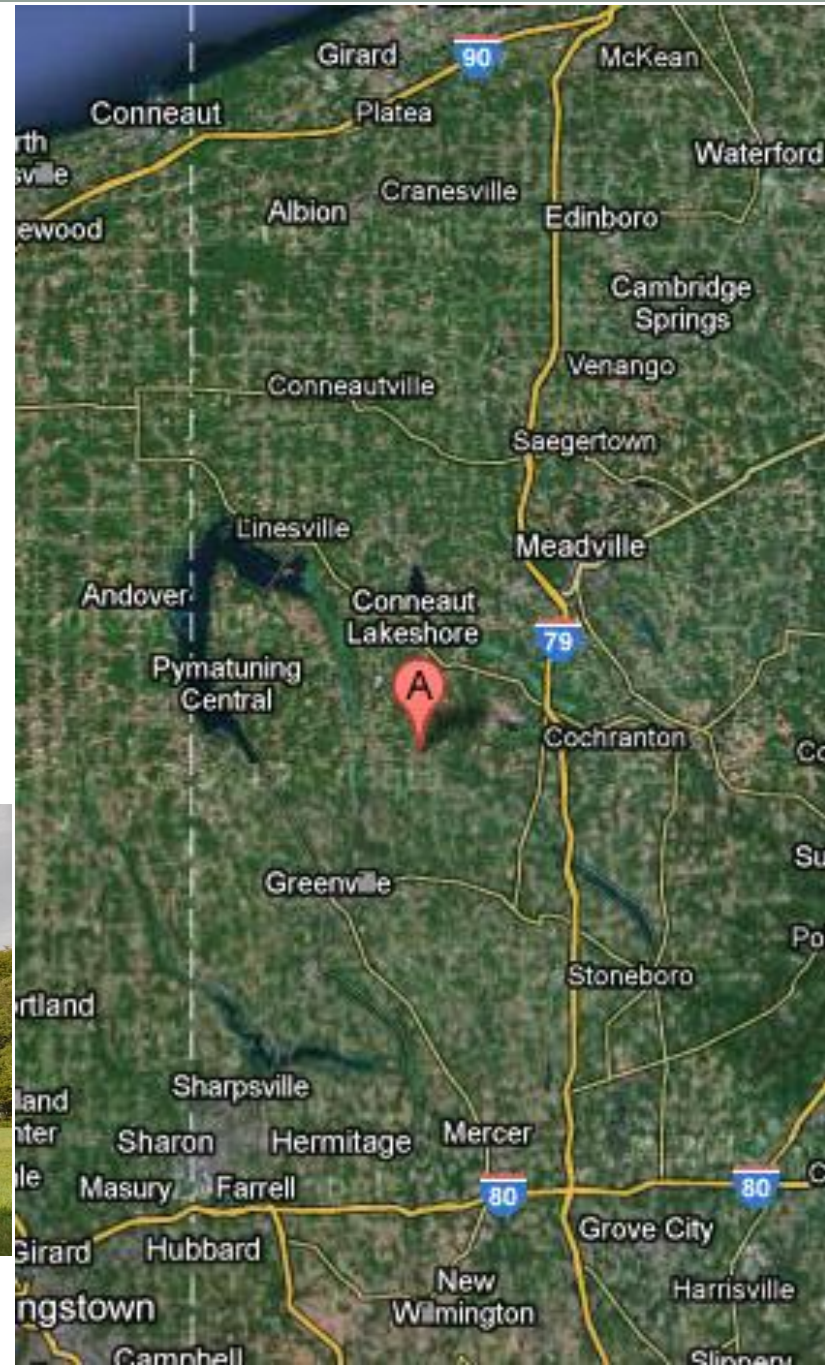
January 28, 2012

Points To Be Covered

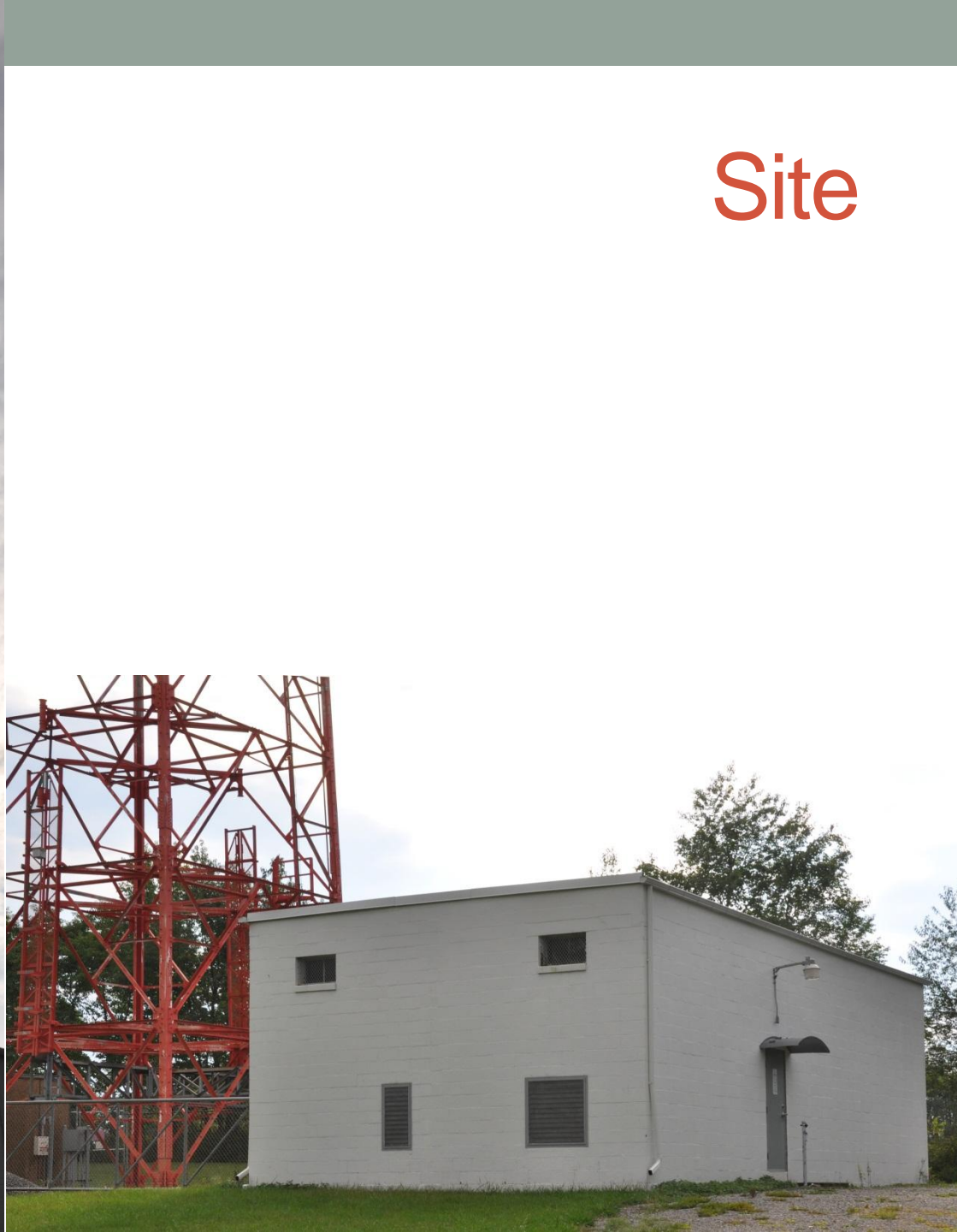
- History
- Atlantic Wireless Society, Inc.
- Hardware
- Software
- Internet
- Complete installation
- Coverage
- Lessons learned
- Future

History

- Location – Atlantic, Pa
- Old AT&T Microwave site
- Had acquired used repeater
- Acquired frequency
- D-Star interest



Site



History

- Past experience
 - W3LIF repeater
 - Several different configurations
 - On since 1970's
 - SPRING repeater system
 - Multiple receive site system

Atlantic Wireless Society, Inc

- Club
 - Name taken from location
 - Wanted to have a formal organization
- Incorporation - Filed in Pennsylvania as non-profit Corporation
- IRS status – Filed for 501(c)3 status
- Club call - K3AWS
 - Two step process
 - To match club name
 - Only one club call per licensee
- Insurance

Hardware

- D-Star
 - Icom ID-RP2C
 - Icom ID-RP2000V (2M)
- Antenna system
 - Sinclair (SRL233-XXXX) Collinear omni, 3 dBd, 2 MHz B.W., 138-174 MHz
 - TX-RX model 28-37-02A 5 cavity duplexer
 - 350 feet 7/8" hardline
 - Lightning protection
- Computer



Computer

- Dell PowerEdge T110 Chassis with up to 4 Cabled Hard Drives
- 2GB Memory (1x2GB), 1333MHz Single Ranked UDIMM
- X3430 Xeon Processor, 2.4 GHz 8M Cache, Turbo
- No Operating System
- On board Network Adapter
- Baseboard Management Controller
- DVD+/-RW, SATA, INTERNAL
- Onboard SATA, 1-4 Hard Drives connected to onboard SATA Controller -No RAID
- 2 x 250GB 7.2k RPM Serial ATA 3Gbps 3.5-in Cabled Hard Drive
- 2 x Intel EXPI9301CTBLK 10/ 100/ 1000Mbps PCI-Express Network Adapter
- Digital Loggers Web Power Switch 4 and UPS

Software

- Linux
 - Centos 5.x
 - Raid 1
 - Dropbox
 - No-ip.com
 - dynDNS.com
 - Remote access SSH
 - Email
 - Webmin
- Icom Gateway software
- Registered call at call.dstargateway.org
- Backup script to save on Dropbox and e-mailed
- ircDDB

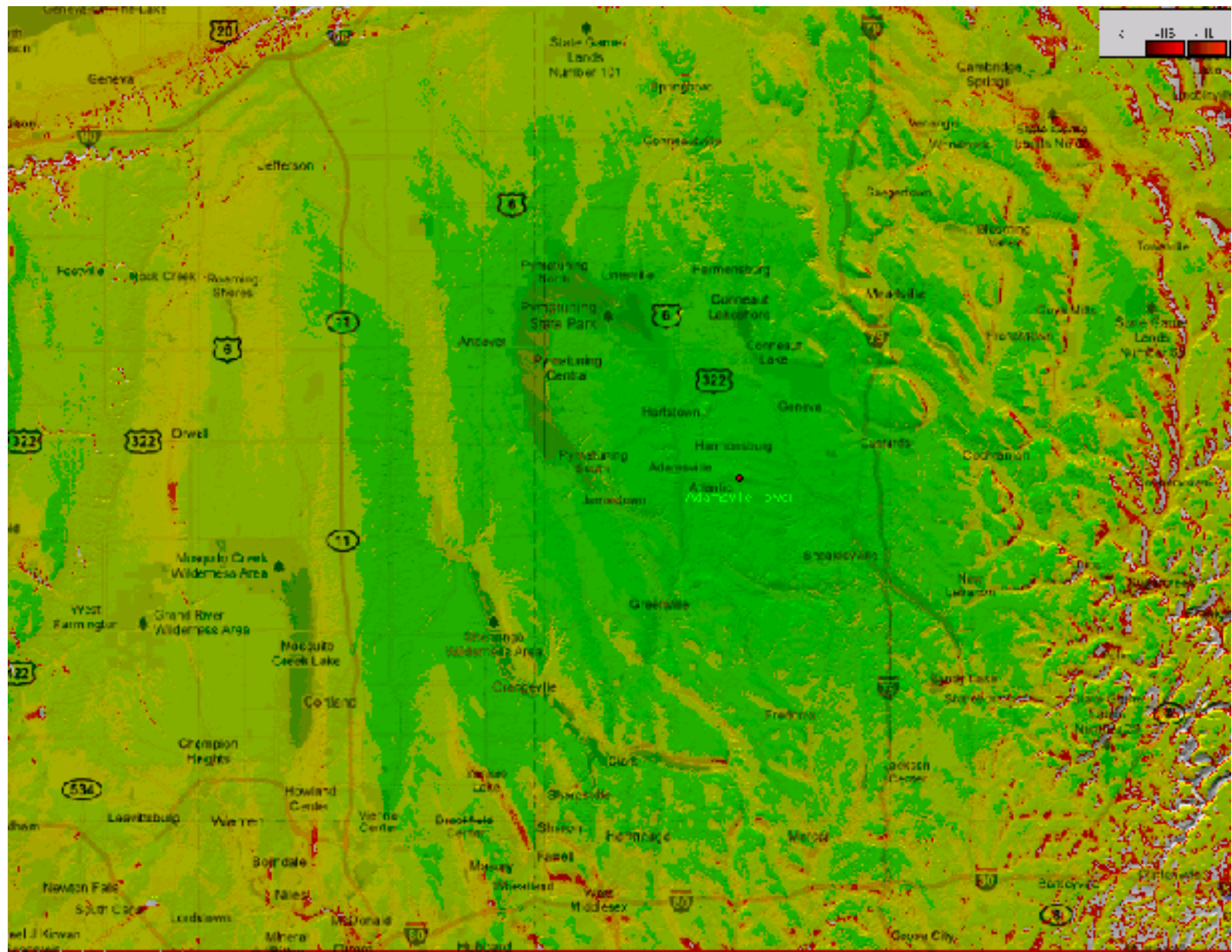
Internet

- Connection
 - Remote
 - Ubiquiti PowerStation5
 - DSL
 - Cable
- IP Address
 - Dynamic
 - Static
- Equipment
 - D-Link DIR-601 IEEE 802.11b/g/n Wireless Broadband Router up to 150Mbps/ 10/100 Mbps Ethernet Port x4
 - Windstream provided modem
- Web site for information and registration
 - www.k3aws.org
 - Link to registration page and Dplus Dashboard

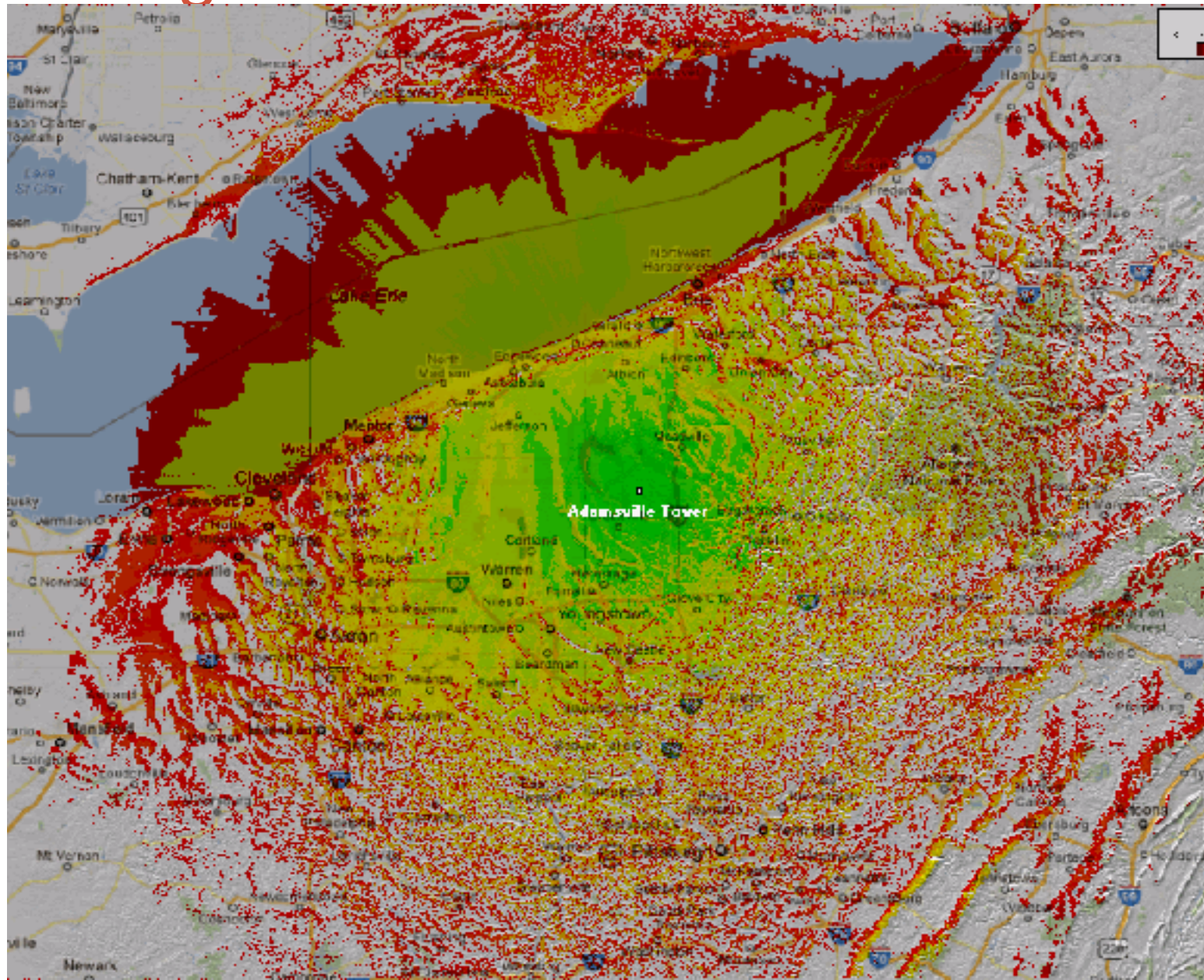
Complete Installation



Coverage 50 miles



Coverage 100 miles



Lessons learned

- Ask for help
- Groups and Sites
 - <http://dsyncg2.dstarusers.org/info/>
 - <http://groups.yahoo.com/group/DStar-Gateway/>
 - <http://www.dstarinfo.com/>
 - <http://www.dstarusers.org/forums/>
- Cost can be higher than expected
- Linux vs Windows

Future additions

- Multiple bands
- STARnet Digital
- Remotely switched battery backup for repeater
- Receiver Pre-amplifier
- Amplifier
- Remote hotspots
- Future technologies

THANK YOU

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