

IOWA DMR GROUP

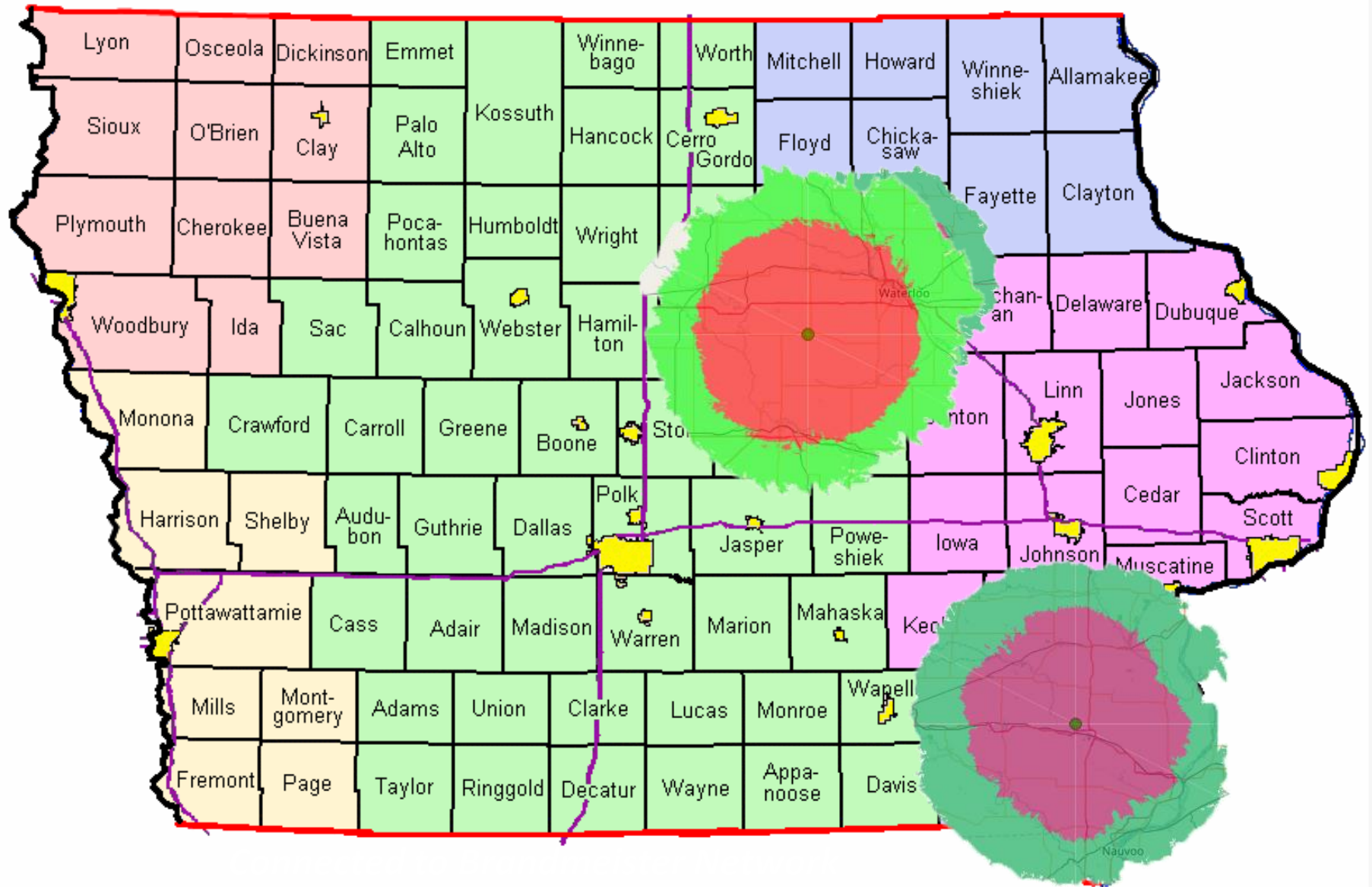
WAØDMR



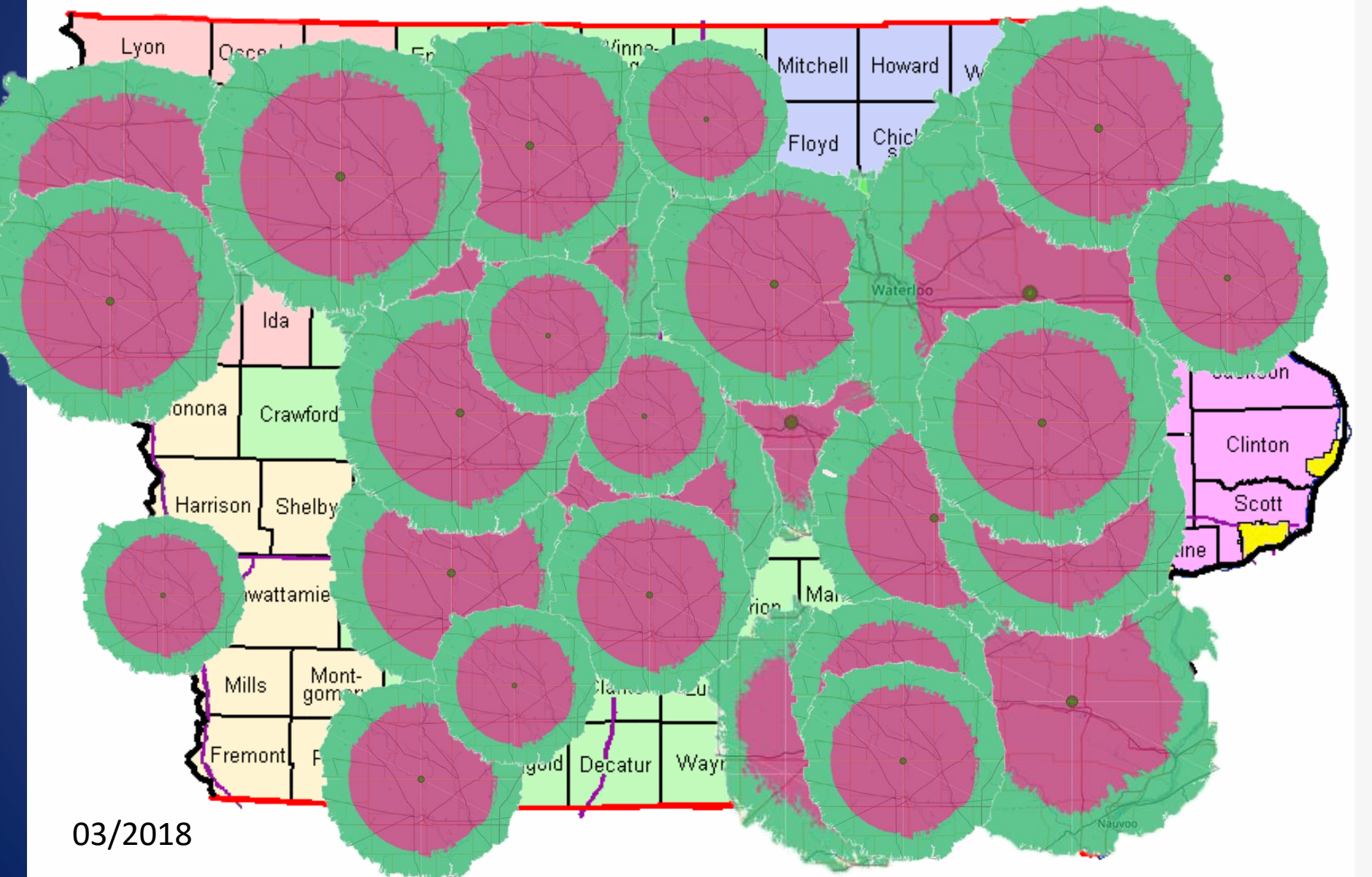
IOWA DMR USERS GROUP 3119

**Tom Reis, NØVPR,
Iowa RACES Officer**

Evolving Iowa DMR Network – March 2017

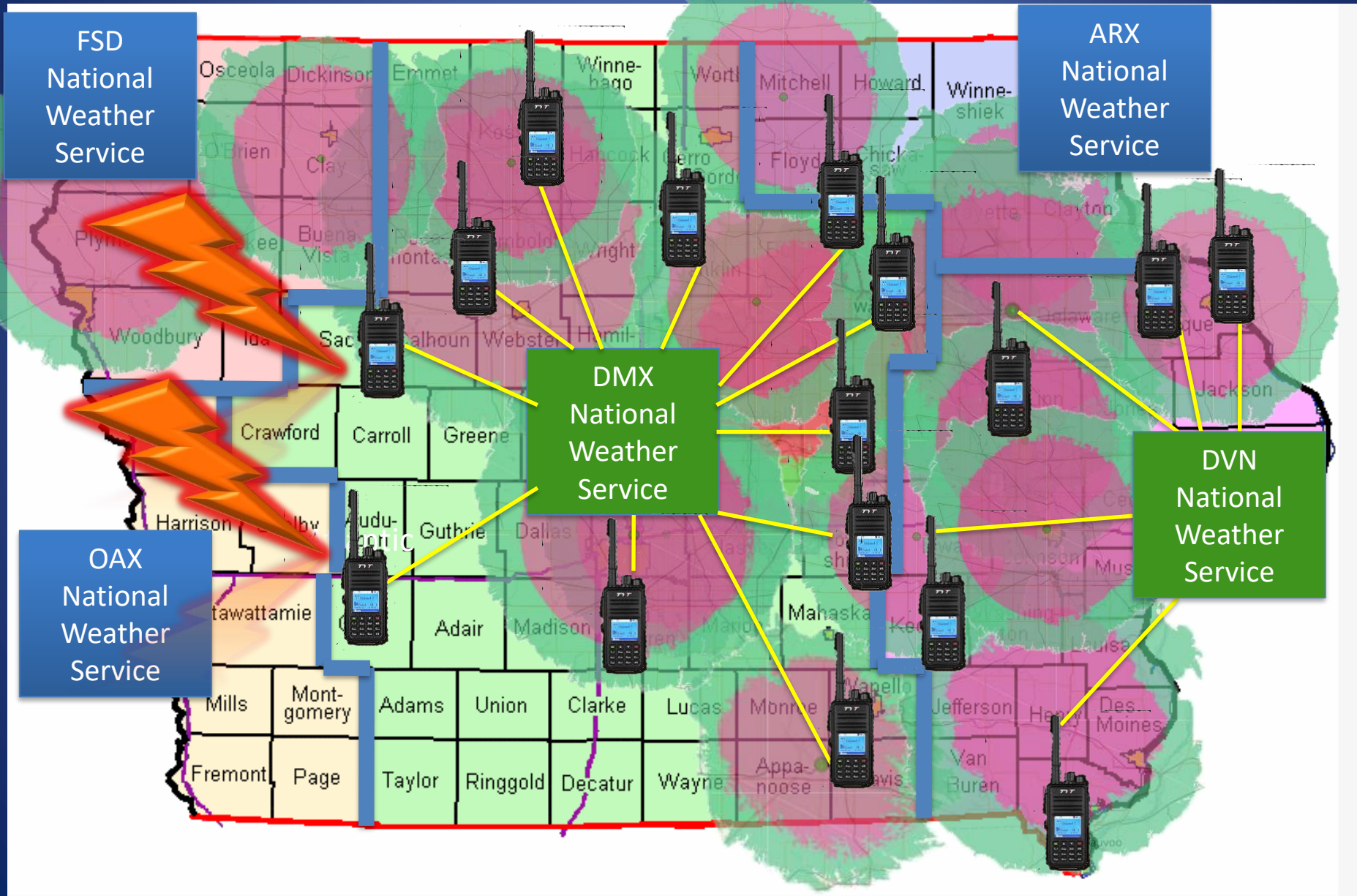


“Evolved” Statewide DMR Coverage March 2018

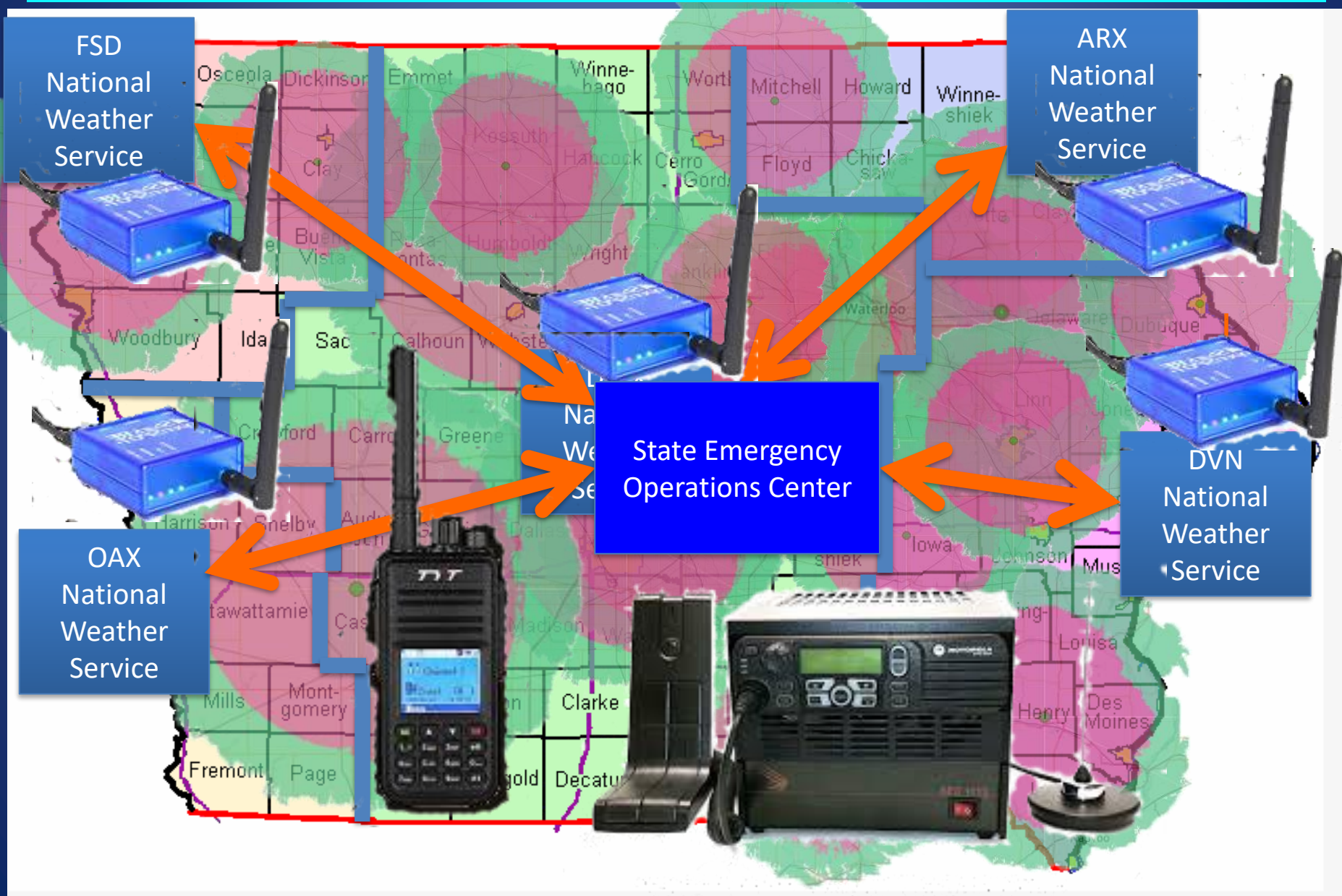


03/2018

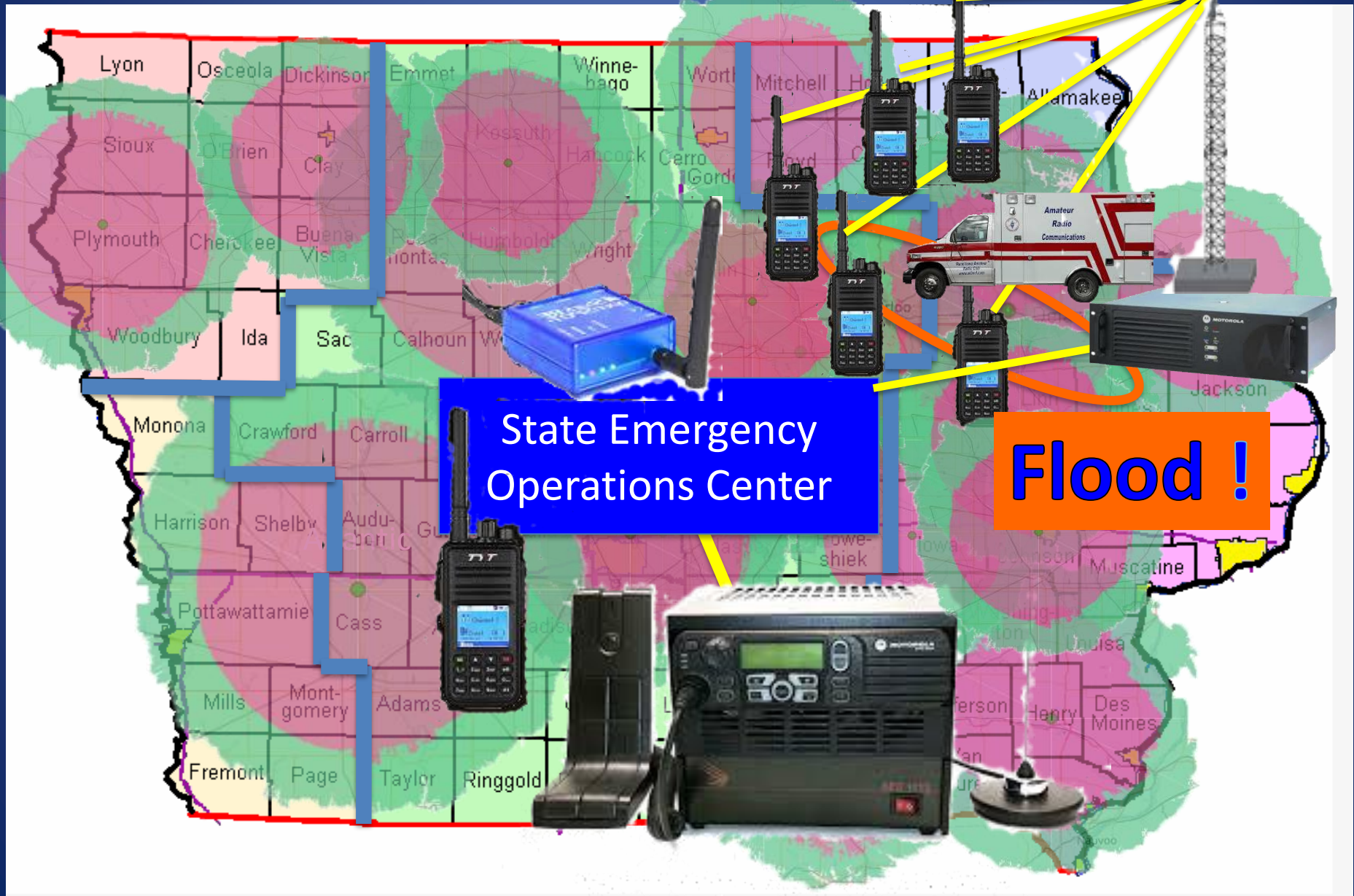
NWS – SKYWARN Weather Spotting



State Emergency Operations Center (SEOC)



ARES Rapid Deployment Capabilities



Some Hotspot updates in 2018

Until a few months ago we had just:



No new sales of this device, so here comes the next crop of boards and s/w

Zumspot from HRO



ZUMspot RPi UHF Hotspot Board -
Requires Raspberry Pi 3 or Pi Zero W
\$109.95



ZUMspot RPi UHF Hotspot Board Kit
- With Raspberry Pi Zero W -
Requires Power Through Micro USB
\$129.95

Cases are available running from <\$5 to >\$25
Some are 3D printed, Acrylic or Metal

Jumbospot



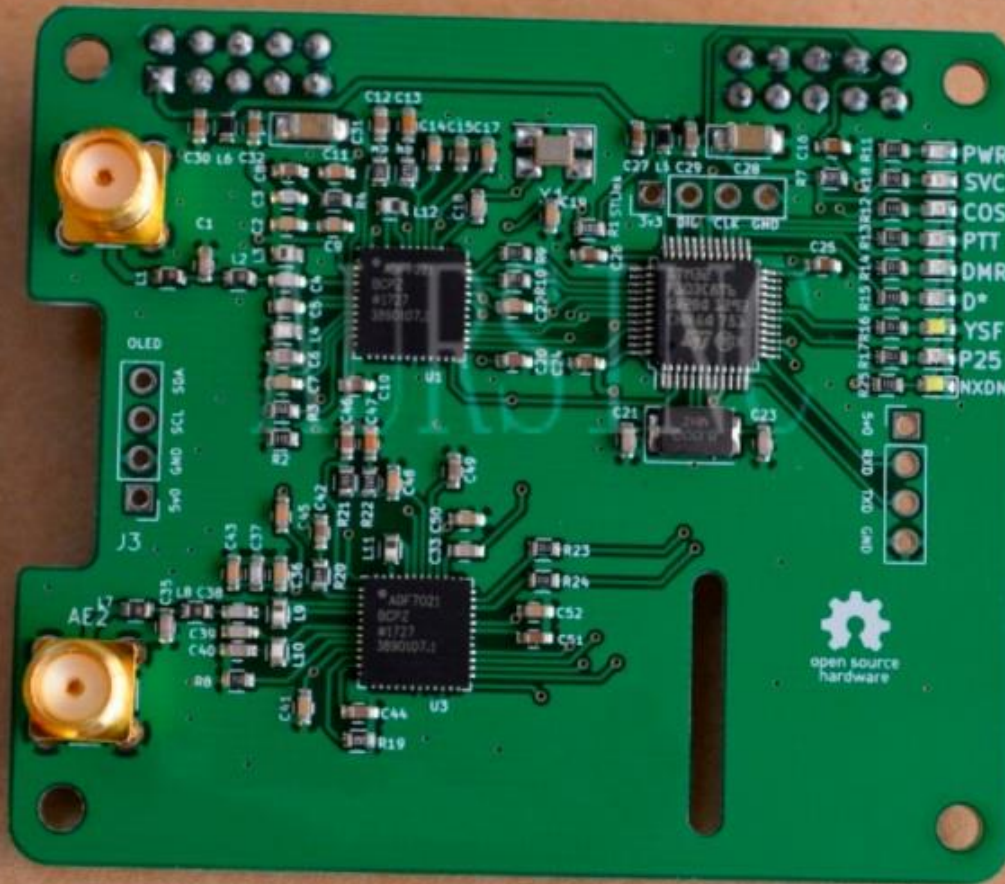
Available in many configurations from a bare board to a fully integrated product that includes a Pi-Zero W, Antenna, OLED display and a case as shown here. Most complete units come preconfigured with Pi-Star s/w included on a micro-SD card. These units are coming from China though some are stocked and shipped from within the US. This may cost a little more purchased this way, but the warranty if ever needed is probably going to be easier to receive. Output power is defaulted to 10 mw. Prices run from <\$50 to >\$130 depending on items included.

NANO-SPOT



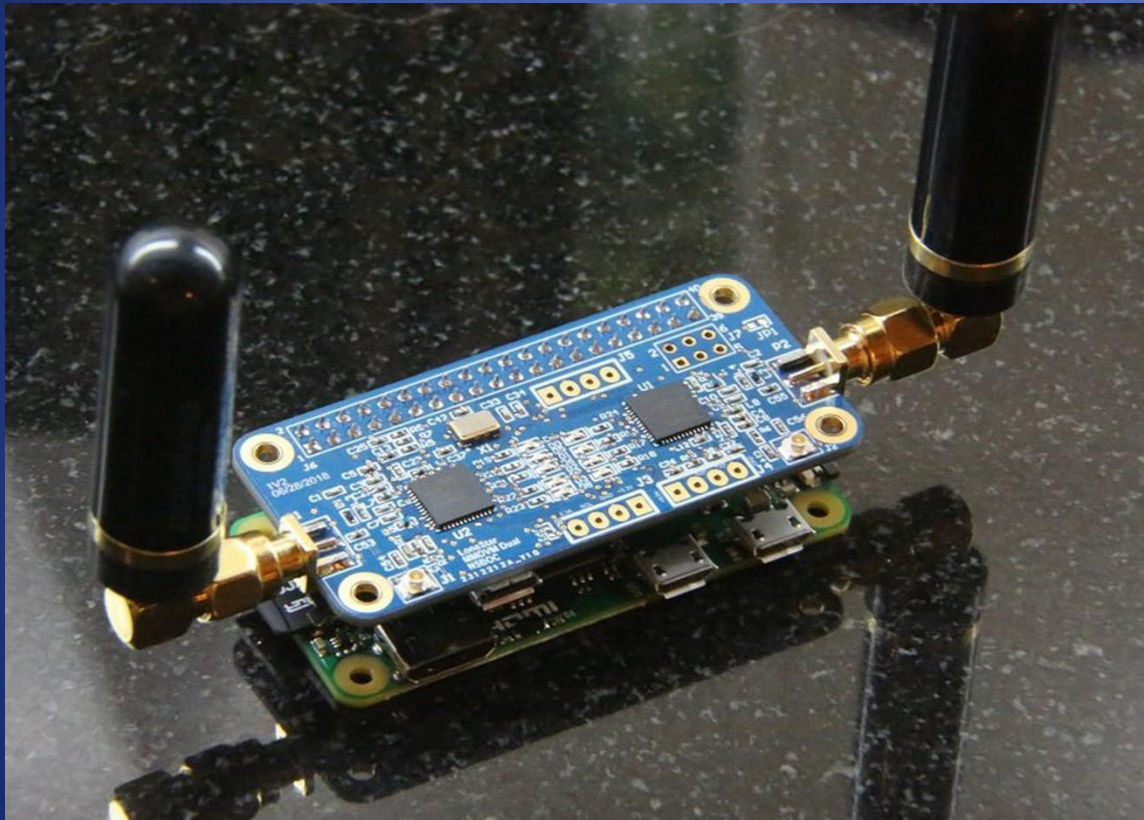
NANO-SPOT is a completely self-contained digital hotspot supporting DMR, Dstar, P25 and System Fusion communications. Fully assembled and tested in a ruggedized extruded aluminum enclosure. All that's required for operation is a power source and a WiFi based internet connection. \$299.99

DualSpot_HS_Hat



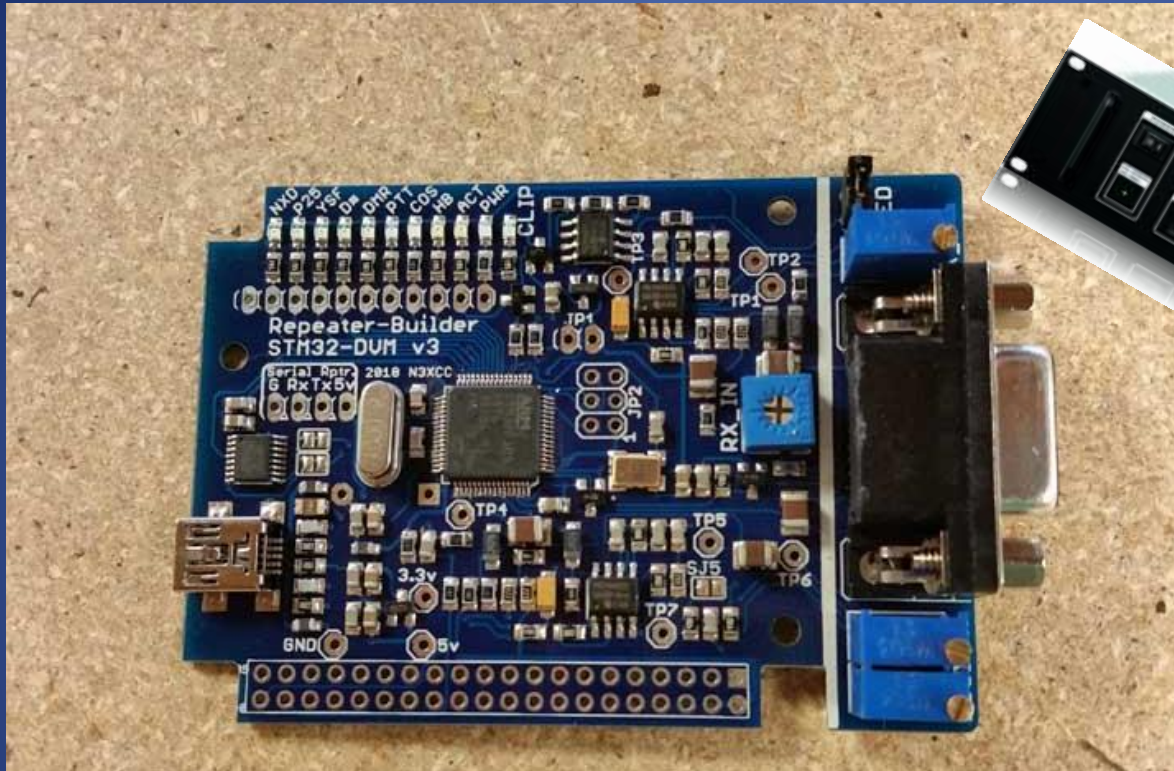
- Fits on top of a Raspberry Pi
- Can operate with two timeslots and/or Talkgroups at the same time
- Needs 5MHz frequency offsets for xmit and receive like a repeater
- Optional Outputs for a Nextion display or .96" OLED

DualSpot_HS_Hat



- Fits on top of a Raspberry Pi Zero
- Made in USA
- Gold Plated Contacts
- 4-Layer Board
- Needs 5MHz frequency offsets for xmit and receive like a repeater
- Optional Outputs for a Nextion display or .96" OLED

STM-32 from Repeater Builder

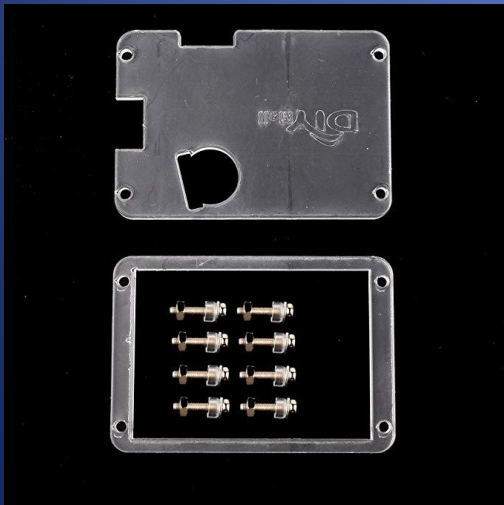
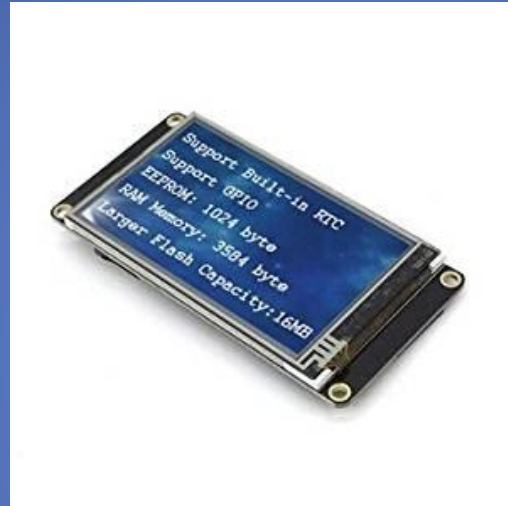
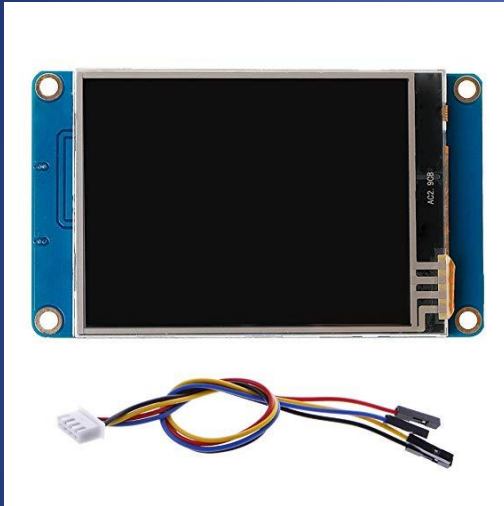


We have used this board with Pi-Star s/w to interface three DR-1x Yeasu Fusion repeaters and convert them to DMR. These DMR repeaters are currently running at Bedford and Scranton. Latest one finished 9/17/18 is going to Creston. Current price is \$85 + \$5 for a case

Nextion Displays

- Display boards are available in sizes of: 2.4", 2.8", 3.2", 3.5", 4.3", 5", 7" for color LCD
- Prices run from <\$15 to >\$130
- Display file programmed from a micro SD card or a USB to serial add-on board to send a *.tft file to the board
- Nextion editor program operates on *.hmi files that are then compiled to create the tft.
- Some "china" displays may be cheaper but cannot utilize the tft files created by the Nextion
- More Cases are becoming available all the time

Nextion Displays/Cases



Cases run from ~\$7 on up

Pi-Star Info

- Web site for the Pi-star image file is at www.pistar.uk:
<http://www.pistar.uk>
- If left connected to the internet, the software is updated automatically each night.
- Though we have been talking primarily about DMR, Pi-Star also will decode D-Star, Fusion (YSF), P25 and NXDN.
- More cross-application decoding is also being worked on such as DMR2YSF, YSF2NXDN, YSF2P25 and others.
- If Pi-Star cannot find a pre-configured Wi-Fi signal it goes into AP mode to allow you to get into configuration and add your “new” Wi-Fi source. Browser IP address in AP mode is 192.168.50.1 .
- Used with support for both hotspots and repeater controllers
- A good reference doc is here: toshen.com/ke0fhs/pi-star.htm and **download the “Playing with Pi-Star” document.**
- AEØTB is working on local enhancements to the web display.

Pi-Star Digital Voice Dashboard for AE0TB

Dashboard | Admin | Live Logs | Power | Update | Configuration

Gateway Hardware Information

Hostname	Kernel	Platform	CPU Load	CPU Temp	
zumspot	4.9.35+	Pi Zero W Rev 1.1 (512MB)	1.25 / 0.7 / 0.3	43.3°C / 109.9°F	
Service Status					
MMDVMHost	DMRGateway	YSFGateway	YSFParrot	P25Gateway	P25Parrot
DStarRepeater	ircDDBGateway	TimeServer	PiStar-Watchdog	PiStar-Remote	PiStar-Keeper

Modes Enabled	
D-Star	DMR
YSF	P25
YSF XMode	NXDN

Network Status	
D-Star Net	DMR Net
YSF Net	P25 Net
YSF2DMR	NXDN Net
YSF2NXDN	YSF2P25
DMR2NXDN	DMR2YSF

Radio Info	
Trx	Listening
Tx	441.200000 MHz
Rx	441.200000 MHz
FW	ZUMspot:v1.3.3

DMR Repeater	
DMR ID	311910802
DMR CC	1
TS1	disabled
TS2	enabled
TG 3119/No Ref	
DMR Master	
BM United States ..	

Active BrandMeister Connections

BrandMeister Master	Default Ref	Timeout(s)	Active Ref	Static TGs	Dynamic TGs
BM United States 3101	Not Set	Not Set	None	TG3119 TG31199 TG311999	TG311999

BrandMeister Manager

Tools	Active Ref	Link / Unlink	Action
Drop QSO Drop All Dynamic	None	<input type="radio"/> Link <input checked="" type="radio"/> UnLink	Modify Reflector
Static Talkgroup	Slot	Add / Remove	Action
	<input type="radio"/> TS1 <input checked="" type="radio"/> TS2	<input checked="" type="radio"/> Add <input type="radio"/> Delete	Modify Static

Gateway Activity

Time (CDT)	Mode	Callsign	Target	Src	Dur(s)	Loss	BER
11:49:37 Jul 4th	DMR Slot 2	AA0LF	TG 3119	Net	0.5	0%	0.0%
11:48:46 Jul 4th	DMR Slot 2	AE0TB	TG 311999	RF	13.3	0%	0.5%

Local RF Activity

Time (CDT)	Mode	Callsign	Target	Src	Dur(s)	BER	RSSI
11:48:46 Jul 4th	DMR Slot 2	AE0TB	TG 311999	RF	13.3	0.5%	

Pi-Star Admin Screen

Pi-Star Digital Voice - Configuration

Dashboard | Admin | Expert | Power | Update | Backup/Restore | Factory Reset

Gateway Hardware Information

Hostname:	Kernel:	Platform:	CPU Load:	CPU Temp:
zumspot	4.9.35+	Pi Zero W Rev 1.1 (512/8)	0.24 / 0.55 / 0.39	43.3°C / 109.9°F

Control Software

Setting	Value
Controller Software:	<input type="radio"/> DStarRepeater <input checked="" type="radio"/> MMDVMHost (DV-Mega Minimum Firmware 3.07 Required)
Controller Mode:	<input checked="" type="radio"/> Simplex Mode <input type="radio"/> Duplex Repeater (or Half-Duplex on Hotspots)

Apply Changes

MMDVMHost Configuration

Setting	Value
DMR Mode:	<input checked="" type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
D-Star Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
YSF Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
P25 Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
NXDN Mode:	<input type="checkbox"/> RF Hangtime: 20 Net Hangtime: 20
YSF2DMR:	<input type="checkbox"/>
YSF2NDN:	<input type="checkbox"/>
YSF2P25:	<input type="checkbox"/>
DMR2YSF:	<input type="checkbox"/> Uses 7 prefix on DMRGateway
DMR2NDN:	<input type="checkbox"/> Uses 7 prefix on DMRGateway
MMDVM Display Type:	None <input type="button" value="v"/> Port: /dev/ttyAMA0 <input type="button" value="v"/> Nextion Layout: G4KLX <input type="button" value="v"/>

Apply Changes

General Configuration

Setting	Value
Hostname:	zumspot Do not add suffixes such as .local
Node Callsign:	AE0TB
CCS7/DMR ID:	311910002
Radio frequency:	441.200.000 MHz
Latitude:	42.3255 degrees (positive value for North, negative for South)
Longitude:	-92.6061 degrees (positive value for East, negative for West)
Town:	Reinbeck, Ia
Country:	USA
URL:	http://www.qrz.com/db/AE0TB <input checked="" type="radio"/> Auto <input type="radio"/> Manual
Radio/Modem Type:	ZumSpot - Raspberry Pi Hat (GPIO) <input type="button" value="v"/>
Node Type:	<input type="radio"/> Private <input checked="" type="radio"/> Public
System Time Zone:	America/Chicago <input type="button" value="v"/>
Dashboard language:	english_uk <input type="button" value="v"/>

Apply Changes

DMR Configuration

Setting	Value
DMR Master:	BM_United_States_3101
BrandMeister Network:	Repeater Information Edit Repeater (BrandMeister Selfcare)
DMR Colour Code:	1
DMR EmbeddedLOnly:	<input type="checkbox"/>
DMR DumpTAData:	<input checked="" type="checkbox"/>

Apply Changes

Firewall Configuration

Setting	Value
Dashboard Access:	<input type="radio"/> Private <input checked="" type="radio"/> Public
In:DDMGateway Remote:	<input type="radio"/> Private <input checked="" type="radio"/> Public
SSH Access:	<input type="radio"/> Private <input checked="" type="radio"/> Public
Auto AP:	<input checked="" type="radio"/> On <input type="radio"/> Off Note: Reboot Required IF changed
uPNP:	<input checked="" type="radio"/> On <input type="radio"/> Off

Apply Changes

Wireless Configuration

Refresh Reset WiFi Adaptor Configure WiFi

Wireless Information and Statistics

Interface Information	Wireless Information
Interface Name : wlan0	Connected To : THOM2014
Interface Status : Interface is up	AP Mac Address : e0:3f:49:f1:f3:50
IP Address : 189.0.253.249	Bitrate : 72.2 MBit/s
Subnet Mask : 255.255.0.0	Signal Level : -43 dBm
Mac Address : b8:27:eb:f9:fa:bb	Transmit Power : 31 dBm
Interface Statistics	Link Quality : 67/70
Received Packets : 5459	
Received Bytes : 1429636 (1.3 MiB)	
Transferred Packets : 4959	
Transferred Bytes : 2860264 (2.7 MiB)	

Information provided by ifconfig and iwconfig

Remote Access Password

User Name	Password	
pi-star	<input type="password"/>	<input type="password"/>
<input type="button" value="Set Password"/>		
WARNING: This changes the password for this admin page AND the "pi-star" SSH account		

Pi-Star Digital Voice Dashboard for AE0TB

Dashboard | Admin | Configuration

Modes Enabled	
D-Star	DMR
YSF	P25
YSF XMode	NXDN

Network Status	
D-Star Net	DMR Net
YSF Net	P25 Net
YSF2DMR	NXDN Net
YSF2NXDN	YSF2P25
DMR2NXDN	DMR2YSF

Radio Info	
Trx	Listening
Tx	444.600000 MHz
Rx	449.600000 MHz
FW	MMDVM:20170501

DMR Repeater	
DMR ID	311910801
DMR CC	1
TS1	enabled
TG 31190/No Ref	
TS2	enabled
TG 3119/No Ref	
DMR Master	
BM United States ..	

Gateway Activity for AE0TB DualSpot, Reinbeck, Iowa at 11:05:29pm

Time (CDT)	Mode	Callsign	Name	Target	Src	Dur(s)	Loss	BER
22:17:47 Jul 2nd	DMR Slot 2	KA0KMJ	John	TG 3119	Net	0.5	0%	0.0%
21:31:11 Jul 2nd	DMR Slot 2	W0JPJ	Jarod	TG 3119	Net	0.8	0%	0.0%
21:16:59 Jul 2nd	DMR Slot 2	W0TVS	Brad	TG 3119	Net	6.6	0%	0.0%
21:16:27 Jul 2nd	DMR Slot 2	W0SMS	Robert	TG 3119	Net	28.2	0%	0.0%
21:14:11 Jul 2nd	DMR Slot 1	KE0DHO	Bernard	TG 31190	Net	0.5	0%	0.0%
20:54:30 Jul 2nd	DMR Slot 2	N0XOA	John	TG 3119	Net	0.8	0%	0.0%
20:32:23 Jul 2nd	DMR Slot 1	KE0PJJ	John	TG 31190	Net	4.4	0%	0.0%
19:42:33 Jul 2nd	DMR Slot 1	W0ESQ	Larry	TG 31190	Net	0.5	0%	0.0%
19:41:31 Jul 2nd	DMR Slot 2	W0ESQ	Larry	TG 3119	Net	0.8	0%	0.0%
19:22:06 Jul 2nd	DMR Slot 2	KA0AQQ	William	TG 3119	Net	0.1	0%	0.0%
18:54:22 Jul 2nd	DMR Slot 2	N0IWT	Kevin	TG 3119	Net	5.5	0%	0.0%
18:27:37 Jul 2nd	DMR Slot 2	K0BL	William	TG 3119	Net	2.3	64%	0.0%
18:06:33 Jul 2nd	DMR Slot 2	KD0IOL	Ethan	TG 3119	Net	5.2	0%	0.0%
17:57:57 Jul 2nd	DMR Slot 2	W6IR	Henry	TG 3119	Net	1.6	0%	0.0%
17:27:04 Jul 2nd	DMR Slot 2	KB0MYP	Ronald	TG 3119	Net	0.1	0%	0.0%
16:55:31 Jul 2nd	DMR Slot 2	KE0IPI	Dale	TG 3119	Net	1.2	0%	0.0%
16:21:05 Jul 2nd	DMR Slot 2	KC0GPB	Peter	TG 3119	Net	0.5	0%	0.0%
16:10:17 Jul 2nd	DMR Slot 1	W0DAN	Daniel	TG 31190	Net	6.2	0%	0.0%
16:04:17 Jul 2nd	DMR Slot 2	N0AXW	Douglas	TG 3119	Net	0.5	0%	0.0%
14:47:19 Jul 2nd	DMR Slot 2	KA0JPN	Pierre	TG 3119	Net	8.5	0%	0.0%
14:46:35 Jul 2nd	DMR Slot 2	W0DQ	Ray	TG 3119	Net	36.8	0%	0.0%
14:21:35 Jul 2nd	DMR Slot 2	WA0VUS	Larry	TG 3119	Net	0.5	0%	0.0%
13:55:48 Jul 2nd	DMR Slot 2	WA0GZW	David	TG 3119	Net	1.6	0%	0.0%
13:08:35 Jul 2nd	DMR Slot 2	N0SKF	Dusty	TG 3119	Net	3.4	0%	0.0%
13:08:23 Jul 2nd	DMR Slot 2	WB0RMT	Larry	TG 3119	Net	0.8	0%	0.0%
13:03:22 Jul 2nd	DMR Slot 2	K0NLC	Gary	TG 3119	Net	0.5	0%	0.0%
12:52:56 Jul 2nd	DMR Slot 1	W0FIA	Keith	TG 31199	Net	0.1	0%	0.0%
12:43:23 Jul 2nd	DMR Slot 1	W0OTM	Marshall	TG 31190	Net	0.5	0%	0.0%
12:43:16 Jul 2nd	DMR Slot 2	W0OTM	Marshall	TG 3119	Net	0.5	0%	0.0%
11:03:15 Jul 2nd	DMR Slot 2	W0KWM	Allen	TG 3119	Net	52.3	0%	0.0%
10:59:50 Jul 2nd	DMR Slot 1	KB0MYP	Ronald	TG 31190	Net	4.1	0%	0.0%
10:36:17 Jul 2nd	DMR Slot 2	AE5EI	Joe	TG 3119	Net	4.4	0%	0.0%
10:35:59 Jul 2nd	DMR Slot 2	W0GEN	Bill	TG 3119	Net	16.3	0%	0.0%
10:34:59 Jul 2nd	DMR Slot 2	KD0Q	Glenn	TG 3119	Net	7.7	7%	0.0%

Local RF Activity

Time (CDT)	Mode	Callsign	Target	Src	Dur(s)	BER	RSSI
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Pi-Star Digital Voice Dashboard for AE0TB

Dashboard | Admin | Configuration

Modes Enabled	
D-Star	DMR
YSF	P25
YSF XMode	NXDN

Network Status	
D-Star Net	DMR Net
YSF Net	P25 Net
YSF2DMR	NXDN Net
YSF2NXDN	YSF2P25
DMR2NXDN	DMR2YSF

Radio Info	
Trx	Listening
Tx	444.600000 MHz
Rx	449.600000 MHz
FW	MMDVM:20170501

DMR Repeater	
DMR ID	311910801
DMR CC	1
TS1	enabled
TG 31190/No Ref	
TS2	enabled
TG 3119/No Ref	
DMR Master	
BM United States ..	

Gateway Activity for AE0TB STM32, Reinbeck, Iowa at 11:07:05pm

Time (CDT)	Mode	Callsign	Name	Target	Src	Dur(s)	Loss	BER
22:17:47 Jul 2nd	DMR Slot 2	KA0KMJ	John Czech	TG 3119	Net	0.5	0%	0.0%
21:31:11 Jul 2nd	DMR Slot 2	W0JJP	Jarod Jacobsen	TG 3119	Net	0.8	0%	0.0%
21:16:59 Jul 2nd	DMR Slot 2	W0TYS	Brad Case	TG 3119	Net	6.6	0%	0.0%
21:16:27 Jul 2nd	DMR Slot 2	W0SMS	Robert Johnson	TG 3119	Net	28.2	0%	0.0%
21:14:11 Jul 2nd	DMR Slot 1	KE0DHO	Bernard Bade	TG 31190	Net	0.5	0%	0.0%
20:54:30 Jul 2nd	DMR Slot 2	N0XOA	John Breeding	TG 3119	Net	0.8	0%	0.0%
20:32:23 Jul 2nd	DMR Slot 1	KE0PJJ	John Roach	TG 31190	Net	4.4	0%	0.0%
19:42:33 Jul 2nd	DMR Slot 1	W0ESQ	Larry C Martindale	TG 31190	Net	0.5	0%	0.0%
19:41:31 Jul 2nd	DMR Slot 2	W0ESQ	Larry C Martindale	TG 3119	Net	0.8	0%	0.0%
19:22:06 Jul 2nd	DMR Slot 2	KA0AQG	William A Carberry	TG 3119	Net	0.1	0%	0.0%
18:54:22 Jul 2nd	DMR Slot 2	N0IWT	Kevin Farnsley	TG 3119	Net	5.5	0%	0.0%
18:27:37 Jul 2nd	DMR Slot 2	K0BL	William Bishop	TG 3119	Net	2.3	64%	0.0%
18:06:33 Jul 2nd	DMR Slot 2	KD0JOL	Ethan Mortensen	TG 3119	Net	5.2	0%	0.0%
17:57:57 Jul 2nd	DMR Slot 2	W6IR	Hank Beisheim	TG 3119	Net	1.6	0%	0.0%
17:27:04 Jul 2nd	DMR Slot 2	KB0MYP	Ronald Nelson	TG 3119	Net	0.1	0%	0.0%
16:55:31 Jul 2nd	DMR Slot 2	KE0IPI	Dale Brass	TG 3119	Net	1.2	0%	0.0%
16:21:05 Jul 2nd	DMR Slot 2	KC0GPB	Peter Lilja	TG 3119	Net	0.5	0%	0.0%
16:10:17 Jul 2nd	DMR Slot 1	W0DAN	Daniel Gray	TG 31190	Net	6.2	0%	0.0%
16:04:17 Jul 2nd	DMR Slot 2	N0AXW	Douglas Martin	TG 3119	Net	0.5	0%	0.0%
14:47:19 Jul 2nd	DMR Slot 2	KA0JPN	Pierre Kellogg	TG 3119	Net	8.5	0%	0.0%
14:46:35 Jul 2nd	DMR Slot 2	W0DQ	Raymond Dennis	TG 3119	Net	36.8	0%	0.0%
14:21:35 Jul 2nd	DMR Slot 2	WA0VUS		TG 3119	Net	0.5	0%	0.0%
13:55:48 Jul 2nd	DMR Slot 2	WA0GZW	David C Smith	TG 3119	Net	1.6	0%	0.0%
13:08:35 Jul 2nd	DMR Slot 2	N0SKF	Dusty Proctor	TG 3119	Net	3.4	0%	0.0%
13:08:23 Jul 2nd	DMR Slot 2	WB0RMT	Larry Stambaugh	TG 3119	Net	0.8	0%	0.0%
13:03:22 Jul 2nd	DMR Slot 2	K0WLC	Gary A Hartig	TG 3119	Net	0.5	0%	0.0%
12:52:56 Jul 2nd	DMR Slot 1	W0FIA	Keith Carpenter	TG 31199	Net	0.1	0%	0.0%
12:43:23 Jul 2nd	DMR Slot 1	W0OTM	Marshall Dias	TG 31190	Net	0.5	0%	0.0%
12:43:16 Jul 2nd	DMR Slot 2	W0OTM	Marshall Dias	TG 3119	Net	0.5	0%	0.0%
11:03:15 Jul 2nd	DMR Slot 2	W0KWM	Allen Johnson	TG 3119	Net	52.3	0%	0.0%
10:59:50 Jul 2nd	DMR Slot 1	KB0MYP	Ronald Nelson	TG 31190	Net	4.1	0%	0.0%
10:36:17 Jul 2nd	DMR Slot 2	AE5EI	Joe Hoepfner	TG 3119	Net	4.4	0%	0.0%
10:35:59 Jul 2nd	DMR Slot 2	W0GEN	Bill Dedic DMR Admin	TG 3119	Net	16.3	0%	0.0%
10:34:59 Jul 2nd	DMR Slot 2	KD0Q	Glenn	TG 3119	Net	7.7	7%	0.0%

Local RF Activity

Time (CDT)	Mode	Callsign	Target	Src	Dur(s)	BER	RSSI
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Pi-Star Digital Voice Dashboard for AE0TB

Dashboard | Admin | Configuration

Modes Enabled	
D-Star	DMR
YSF	P25
YSF XMode	NXDN

Network Status	
D-Star Net	DMR Net
YSF Net	P25 Net
YSF2DMR	NXDN Net
YSF2NXDN	YSF2P25
DMR2NXDN	DMR2YSF

Radio Info	
Trx	Listening
Tx	444.600000 MHz
Rx	449.600000 MHz
FW	MMDVM:20170501

DMR Repeater	
DMR ID	311910801
DMR CC	1
TS1	enabled
TG 31190/No Ref	
TS2	enabled
TG 3119/No Ref	
DMR Master	
BM United States ..	

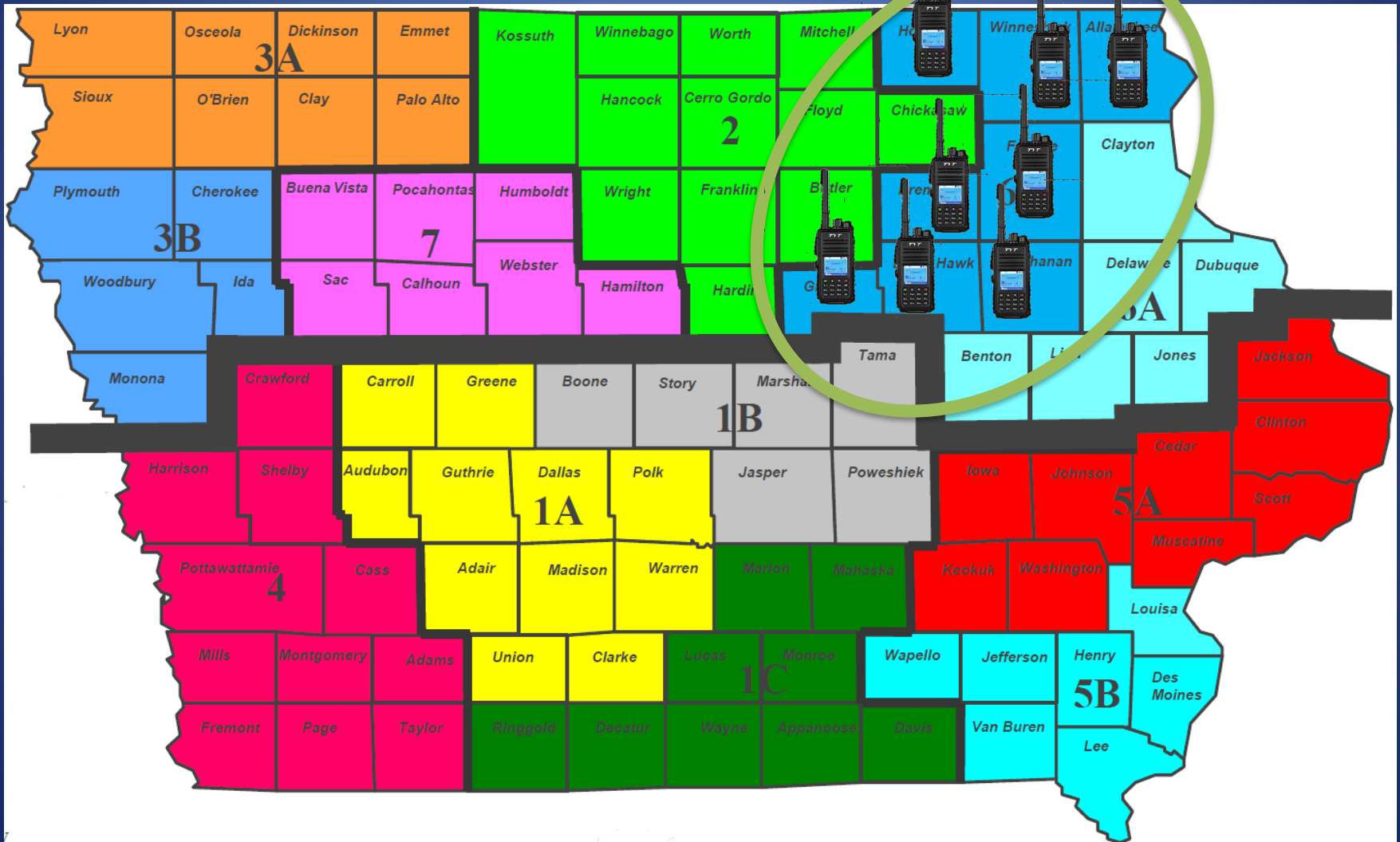
Gateway Activity for AE0TB STM32, Reinbeck, Iowa at 11:08:09pm

Time (CDT)	Mode	Callsign	Name / City / State	Target	Src	Dur(s)	Loss	BER
22:17:47 Jul 2nd	DMR Slot 2	KA0KMJ	John Czech / Brooklyn Park / Minnesota	TG 3119	Net	0.5	0%	0.0%
21:31:11 Jul 2nd	DMR Slot 2	W0JPI	Jarod Jacobsen / Dilworth / Minnesota	TG 3119	Net	0.8	0%	0.0%
21:16:59 Jul 2nd	DMR Slot 2	W0TVS	Brad Case / Bellevue / Nebraska	TG 3119	Net	6.6	0%	0.0%
21:16:27 Jul 2nd	DMR Slot 2	W0SMS	Robert Johnson / Polk City / Iowa	TG 3119	Net	28.2	0%	0.0%
21:14:11 Jul 2nd	DMR Slot 1	KE0DHO	Bernard Bade / New Bloomfield / Missouri	TG 31190	Net	0.5	0%	0.0%
20:54:30 Jul 2nd	DMR Slot 2	N0XOA	John Breeding / Ottumwa / Iowa	TG 3119	Net	0.8	0%	0.0%
20:32:23 Jul 2nd	DMR Slot 1	KE0PJJ	John Roach / Altoona / Iowa	TG 31190	Net	4.4	0%	0.0%
19:42:33 Jul 2nd	DMR Slot 1	W0ESQ	Larry C Martindale / West Des Moines / Iowa	TG 31190	Net	0.5	0%	0.0%
19:41:31 Jul 2nd	DMR Slot 2	W0ESQ	Larry C Martindale / West Des Moines / Iowa	TG 3119	Net	0.8	0%	0.0%
19:22:06 Jul 2nd	DMR Slot 2	KA0AQG	William A Carberry / Aredale / Iowa	TG 3119	Net	0.1	0%	0.0%
18:54:22 Jul 2nd	DMR Slot 2	N0IWT	Kevin Farnsley / Des Moines / Iowa	TG 3119	Net	5.5	0%	0.0%
18:27:37 Jul 2nd	DMR Slot 2	K0BL	William Bishop / Ottumwa / Iowa	TG 3119	Net	2.3	64%	0.0%
18:06:33 Jul 2nd	DMR Slot 2	KD0IOL	Ethan Mortensen / Ely / Iowa	TG 3119	Net	5.2	0%	0.0%
17:57:57 Jul 2nd	DMR Slot 2	W6IR	Hank Beisheim / Kalona / Iowa	TG 3119	Net	1.6	0%	0.0%
17:27:04 Jul 2nd	DMR Slot 2	KB0MYP	Ronald Nelson / Boone / Iowa	TG 3119	Net	0.1	0%	0.0%
16:55:31 Jul 2nd	DMR Slot 2	KE0IPI	Dale Brass / Ackley / Iowa	TG 3119	Net	1.2	0%	0.0%
16:21:05 Jul 2nd	DMR Slot 2	KC0GPB	Peter Lilja / Cedar Falls / Iowa	TG 3119	Net	0.5	0%	0.0%
16:10:17 Jul 2nd	DMR Slot 1	W0DAN	Daniel Gray / Atlanta / Georgia	TG 31190	Net	6.2	0%	0.0%
16:04:17 Jul 2nd	DMR Slot 2	N0AXW	Douglas Martin / Des Moines / Iowa	TG 3119	Net	0.5	0%	0.0%
14:47:19 Jul 2nd	DMR Slot 2	KA0JPN	Pierre Kellogg / Grand Junction / Iowa	TG 3119	Net	8.5	0%	0.0%
14:46:35 Jul 2nd	DMR Slot 2	W0DQ	Raymond Dennis / Johnston / Iowa	TG 3119	Net	36.8	0%	0.0%
14:21:35 Jul 2nd	DMR Slot 2	WA0VUS	/ /	TG 3119	Net	0.5	0%	0.0%
13:55:48 Jul 2nd	DMR Slot 2	WA0GZW	David C Smith / Marshalltown / Iowa	TG 3119	Net	1.6	0%	0.0%
13:08:35 Jul 2nd	DMR Slot 2	N0SKF	Dusty Proctor / Ottumwa / Iowa	TG 3119	Net	3.4	0%	0.0%
13:08:23 Jul 2nd	DMR Slot 2	WB0RMT	Larry Stambaugh / Conrad / Iowa	TG 3119	Net	0.8	0%	0.0%
13:03:22 Jul 2nd	DMR Slot 2	K0WLC	Gary A Hartig / Tipton / Iowa	TG 3119	Net	0.5	0%	0.0%
12:52:56 Jul 2nd	DMR Slot 1	W0FIA	Keith Carpenter / Bridgewater / Iowa	TG 31199	Net	0.1	0%	0.0%
12:43:23 Jul 2nd	DMR Slot 1	W0OTM	Marshall Dias / Soap Creek / Iowa	TG 31190	Net	0.5	0%	0.0%
12:43:16 Jul 2nd	DMR Slot 2	W0OTM	Marshall Dias / Soap Creek / Iowa	TG 3119	Net	0.5	0%	0.0%
11:03:15 Jul 2nd	DMR Slot 2	W0KWM	Allen Johnson / Des Moines / Iowa	TG 3119	Net	52.3	0%	0.0%
10:59:50 Jul 2nd	DMR Slot 1	KB0MYP	Ronald Nelson / Boone / Iowa	TG 31190	Net	4.1	0%	0.0%
10:36:17 Jul 2nd	DMR Slot 2	AE5EI	Joe Hoepfner / Clarksville / Iowa	TG 3119	Net	4.4	0%	0.0%
10:35:59 Jul 2nd	DMR Slot 2	W0GEN	Bill Dedic DMR Admin / Waterloo / Iowa	TG 3119	Net	16.3	0%	0.0%
10:34:59 Jul 2nd	DMR Slot 2	KD0Q	Glenn / Traer / Iowa	TG 3119	Net	7.7	7%	0.0%

Local RF Activity

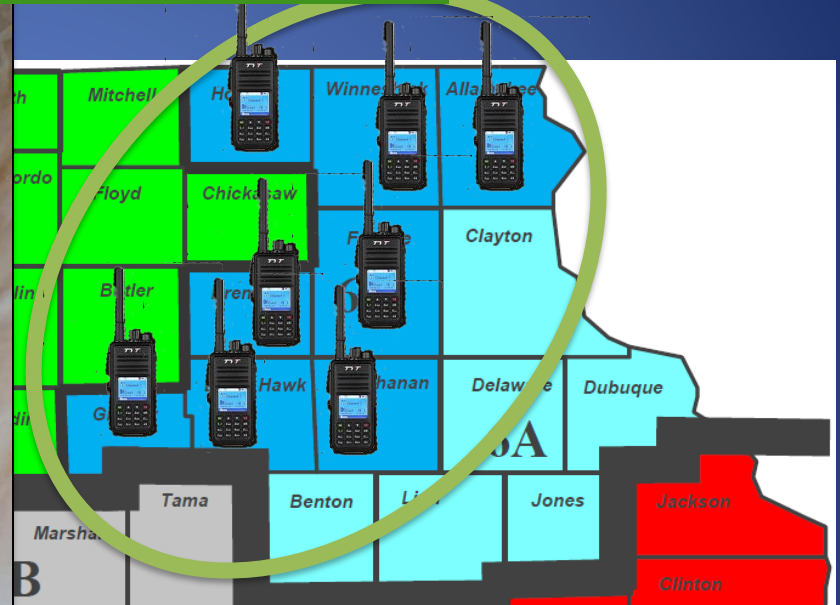
Time (CDT)	Mode	Callsign	Target	Src	Dur(s)	BER	RSSI
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Coalition of Hospitals, Public Health and Emergency Managers



Coalition of Hospitals & Public Health

2017 DMR Radio Kit



2018 Upgraded case for Community Memorial Hospital Sumner

- 2 – Anytone D-868UV Dual Band DMR radios/chargers
- Replaced OpenSpot with a JumboSpot and a Raspberry PI 3B
- Changed out USB battery pack with a better priced, indicating one.
- Replaced Pelican orange case with a slightly smaller better priced case
- By going with the Rpi eliminated the need for routers and simplified IP/WiFi connectivity
- Kept price almost the same as last year's kit with a single UHF only radio



Questions?



Thank You!

IOWA DMR GROUP

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