



August 1, 2016



# Meeting Agenda

- Welcome-Visitors and Members
  - Introductions
- Old Business
  - Field Day 2016 – Report 2/2
  - ADS-B / SDR Discussion
- New Business/ Announcements/ Calendar
  - Fox Hunt
  - Announcements
  - Calendar for 2016
- Next Meeting – **September 12<sup>th</sup> 2016**



# FIELD DAY - June 25-26



# Field Day 2016

**Thank you for your time and effort!**

- CW Team – Dave Bates (KF0XQ) and Gary Taggart (KF0TW)
- VHF/HF SSB – Alan Shivers (N0QL)
- Digi/CW Station – Joe Council (K0OG)
- Picnic – Louis McCarthy (AI0LM) and Steve Miller (N6RHQ) (Charcoal)
- Public Information – Peter Price (N0XZN)
- Test Session – Joe Council (K0OG) and the VE's

Call Used: **W0GS**    GOTA Station Call: **(none)**    ARRL/RAC Section: **MO**    Class: **3A**

Participants: **55**    Club/Group Name: **Rolla Regional Amateur Radio Society**

Power Source(s): **Battery, Solar**

Power Multiplier: **2X**

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**Bonus Points:**

<b>Description</b>	<b>Points</b>
100% Emergency power	300
Media Publicity	100
Public Location	100
NTS message to ARRL SM/SEC	100
W1AW Field Day Message	100
Natural power QSOs completed	100
Youth participation	40
Youth operators= <b>2</b>	
Youth participants= <b>15</b>	
Submitted via the Web	50
Educational activity	100
<b>Total Bonus Points</b>	<b>990</b>

**3,166 Points!**

**Score Summary:**

	<b>CW</b>	<b>Digital</b>	<b>Phone</b>	<b>Total</b>	
<b>Total QSOs</b>	<b>442</b>	<b>1</b>	<b>202</b>		
<b>Total Points</b>	<b>884</b>	<b>2</b>	<b>202</b>	<b>1088</b>	<b>Claimed Score = 2,176</b>

**Submitted by:**

David L Bridges, KCOAES

Call Used: **W0GS**    GOTA Station Call: **(none)**    ARRL/RAC Section: **MO**    Class: **3A**

Participants: **45**    Club/Group Name: **Rolla Regional Amateur Radio Society**

Power Source(s): **Battery, Solar**

Power Multiplier: **2X**

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**Bonus Points:**

Description	Points
100% Emergency power	300
Media Publicity	100
Set-up in Public Place	100
Information Booth	100
NTS message to ARRL SM/SEC	100
Natural power QSOs completed	100
Site Visit by invited elected official	100
Submitted via the Web	50
Educational activity	100
<b>Total Bonus Points</b>	<b>1,050</b>

**2015**

**3,184 Points!**

**Score Summary:**

	CW	Digital	Phone	Total	
<b>Total QSOs</b>	<b>360</b>	<b>58</b>	<b>231</b>		
<b>Total Points</b>	<b>720</b>	<b>116</b>	<b>231</b>	<b>1067</b>	<b>Claimed Score = 2,134</b>

**Submitted by:**

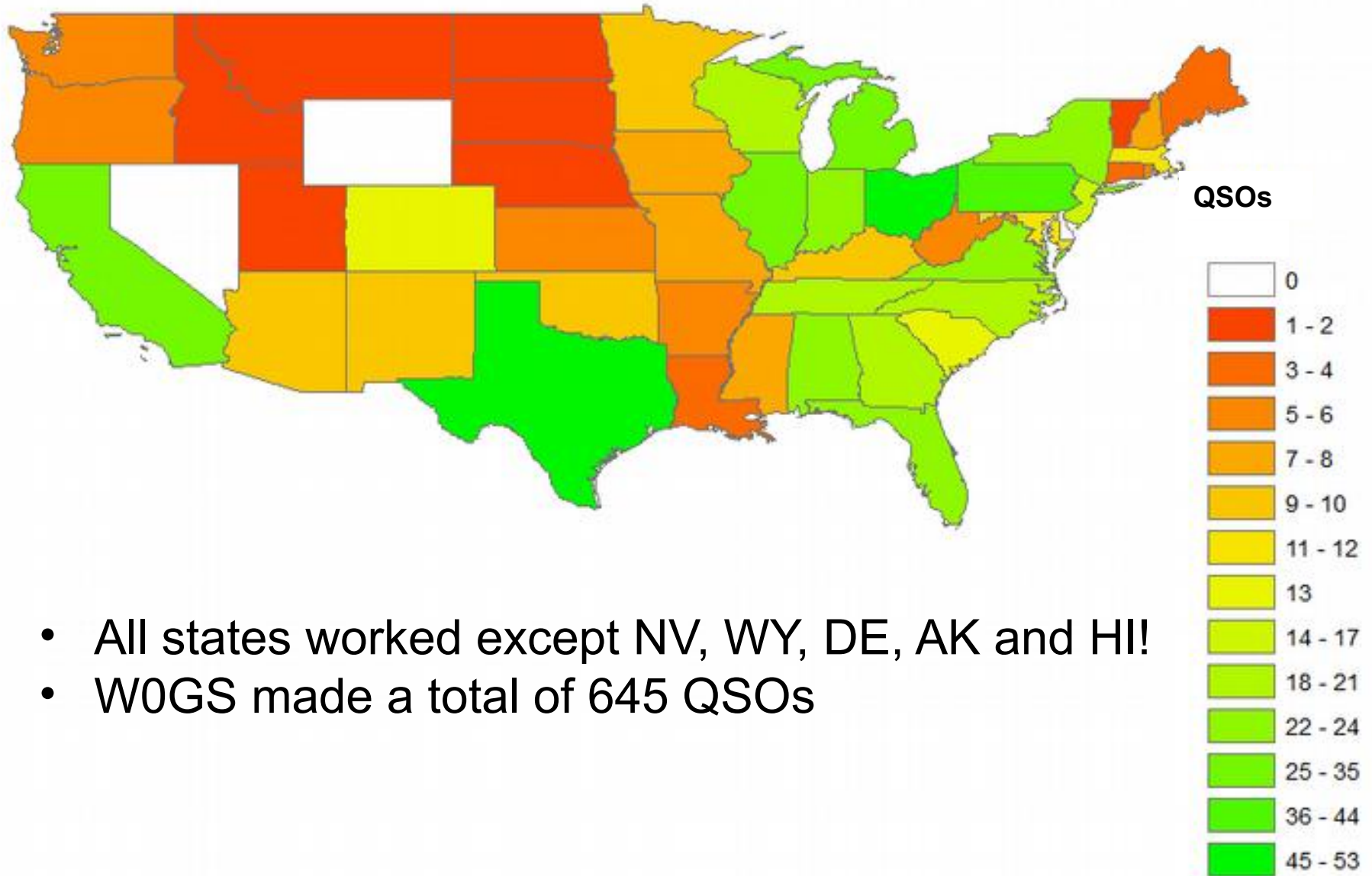
David L. Bridges, KCOAES

PO Box 1834

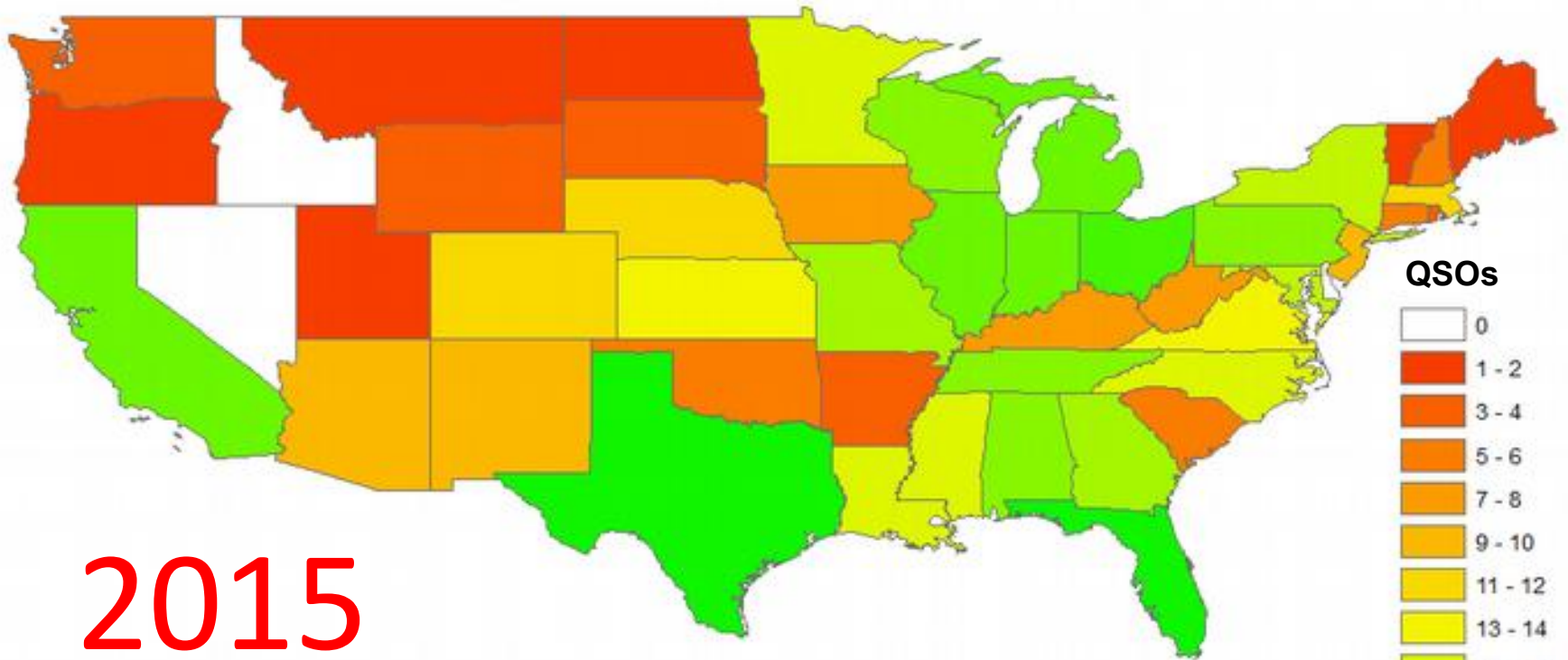
Rolla, MO 65402

E-mail: halebopp2@gmail.com

# W0GS Field Day = All QSOs



# W0GS Field Day = All QSOs

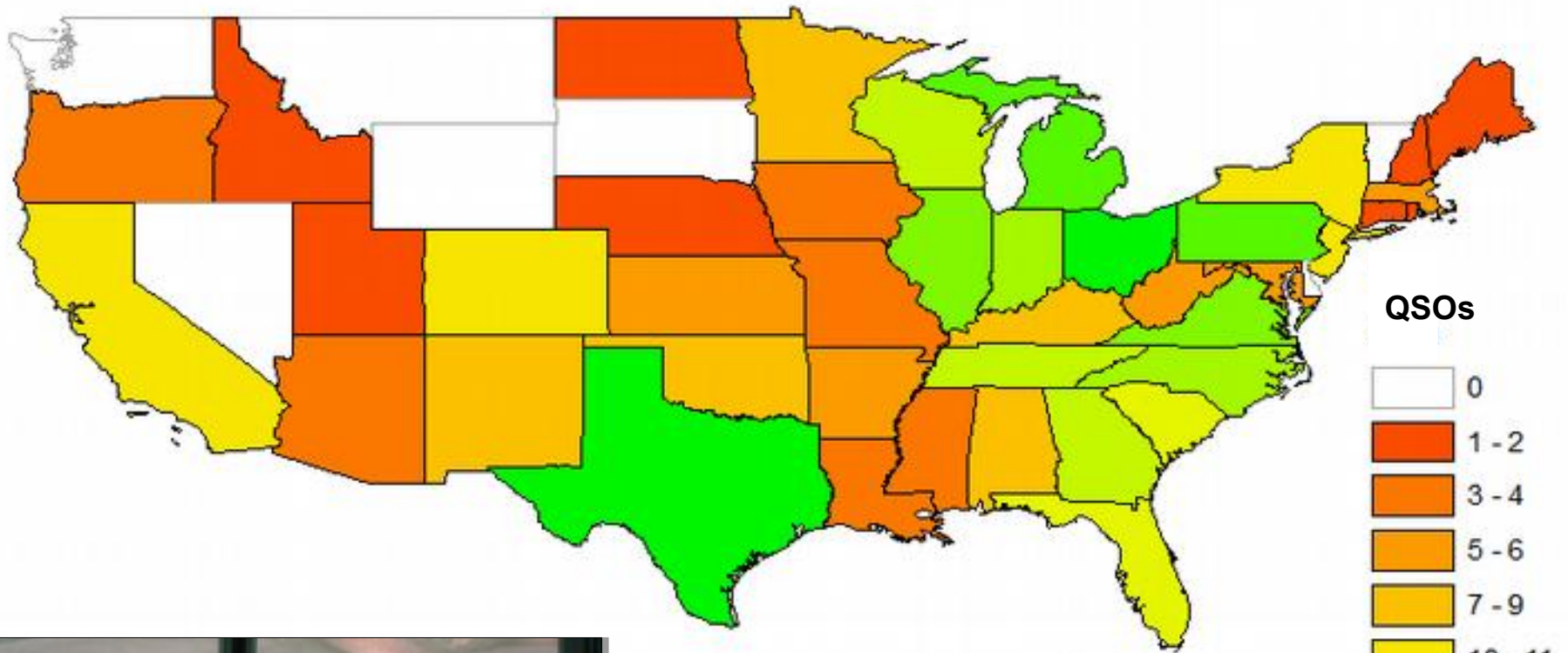


## 2015

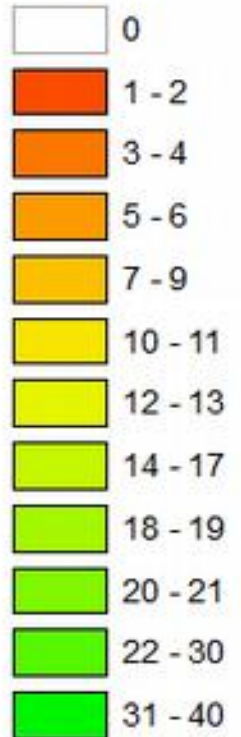
- All states worked except NV, ID, DE, AK and HI!
- W0GS made a total of 649 QSOs



# W0GS Field Day = All CW QSOs



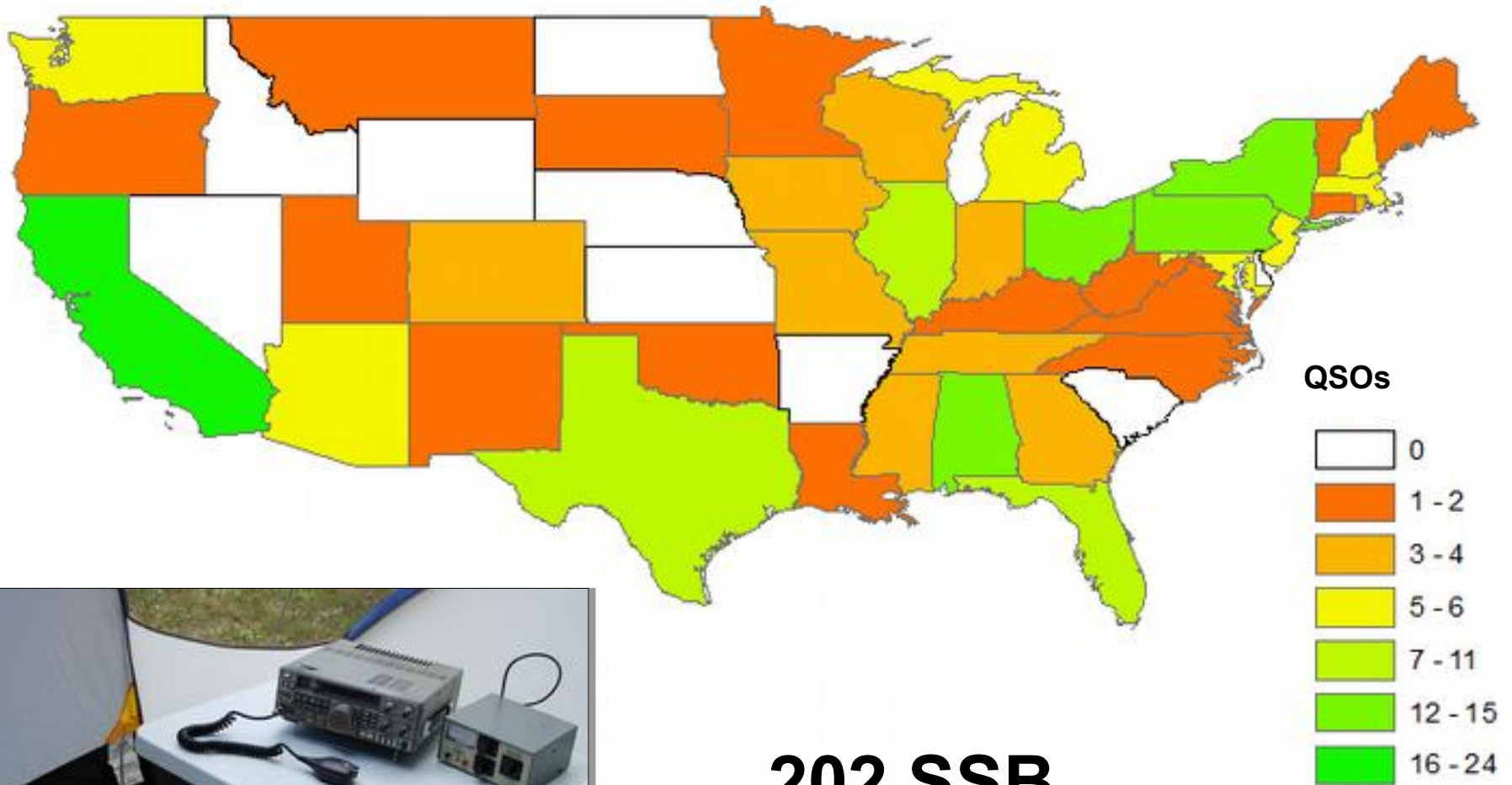
QSOs



**442 CW QSOs**



# W0GS Field Day = All SSB QSOs



**202 SSB  
QSOs**

# W0GS Field Day = 10m CW QSOs

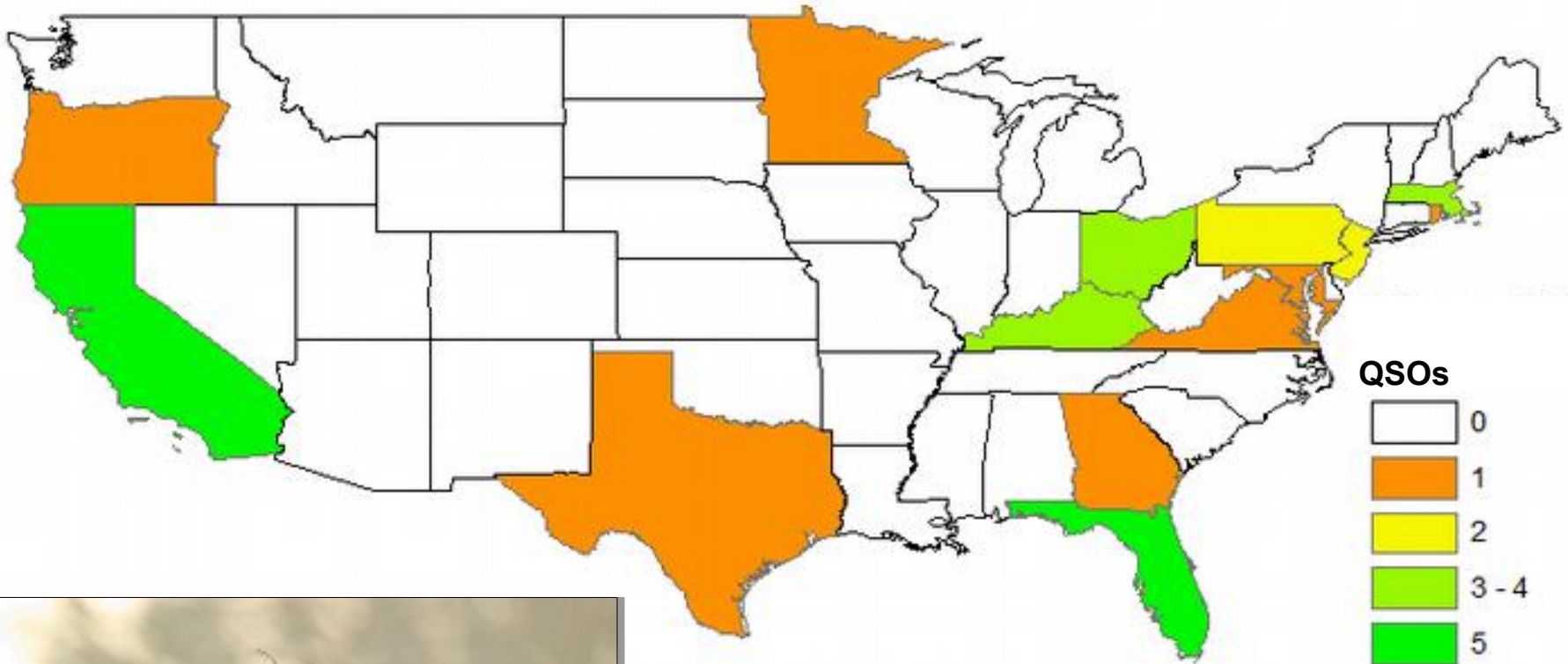


**11 CW  
QSOs**

**7 States – 1 Province**



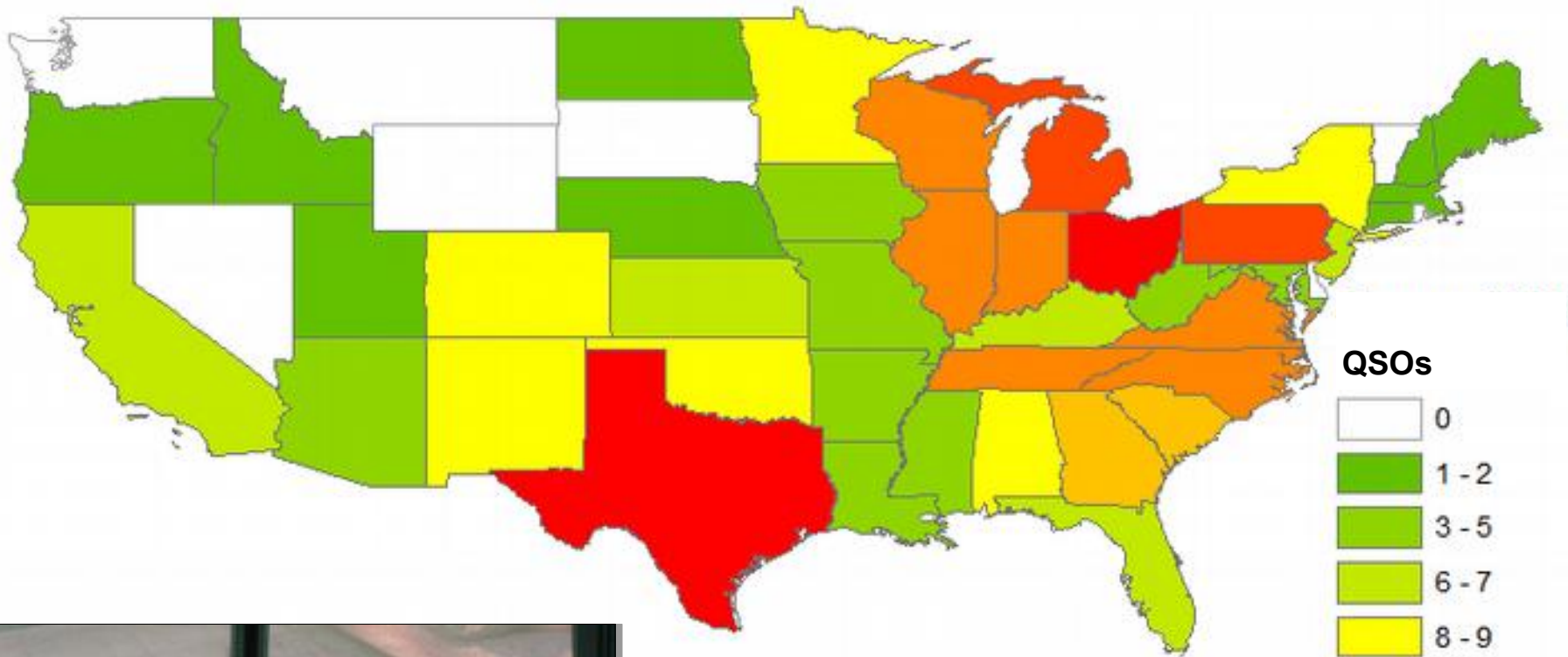
# WOGS Field Day = 20m CW QSOs



**34 CW  
QSOs**

**7 States – 2 Territories**

# W0GS Field Day = 40m CW QSOs



**397 CW  
QSOs**

**40 States – 2 Provinces**



# W0GS Field Day = 20m Digi QSOs



**1 Digi  
QSO**

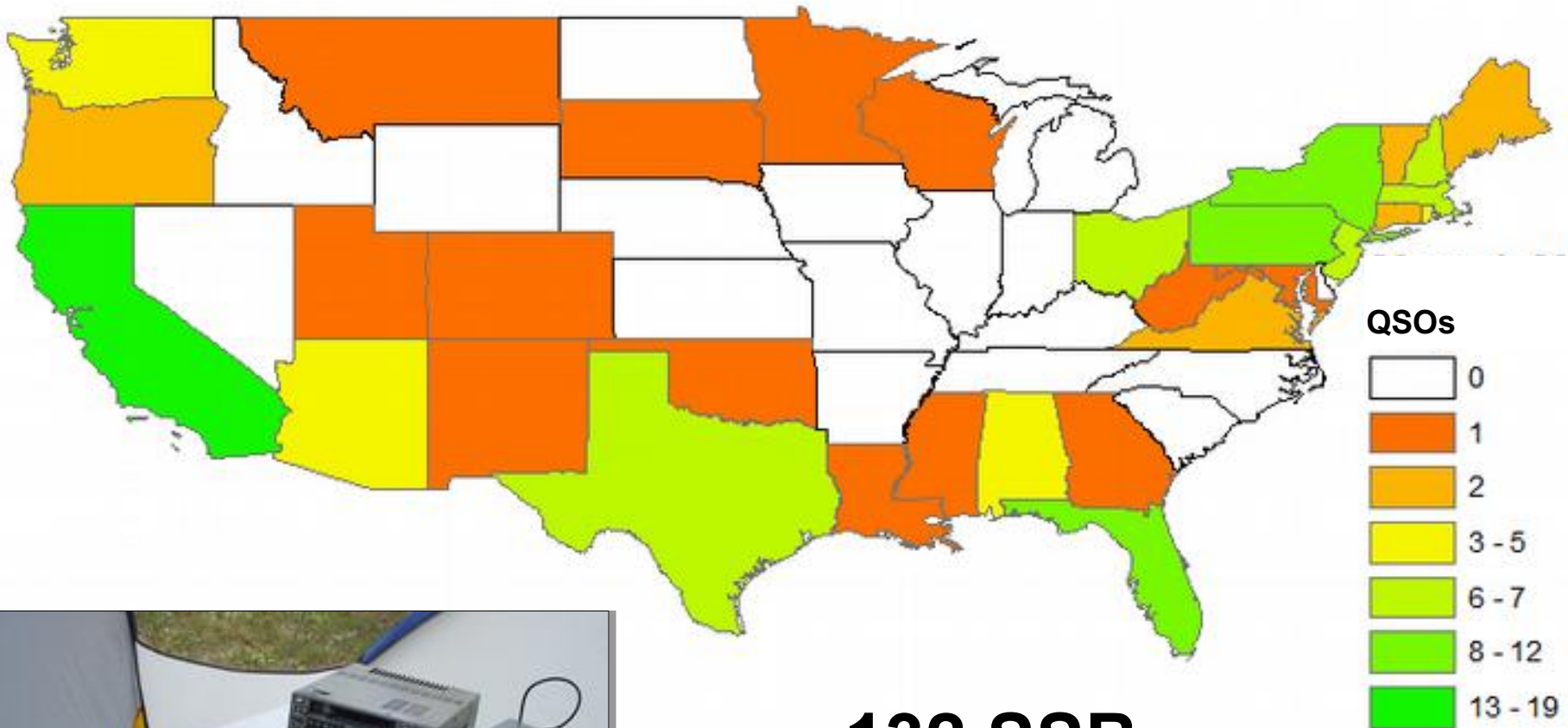
**1 State**

# W0GS Field Day = 6m SSB QSOs



**4 VHF SSB  
QSOs**

# W0GS Field Day = 20m SSB QSOs



**132 SSB  
QSOs**

**31 States – 3 Provinces – Territory**





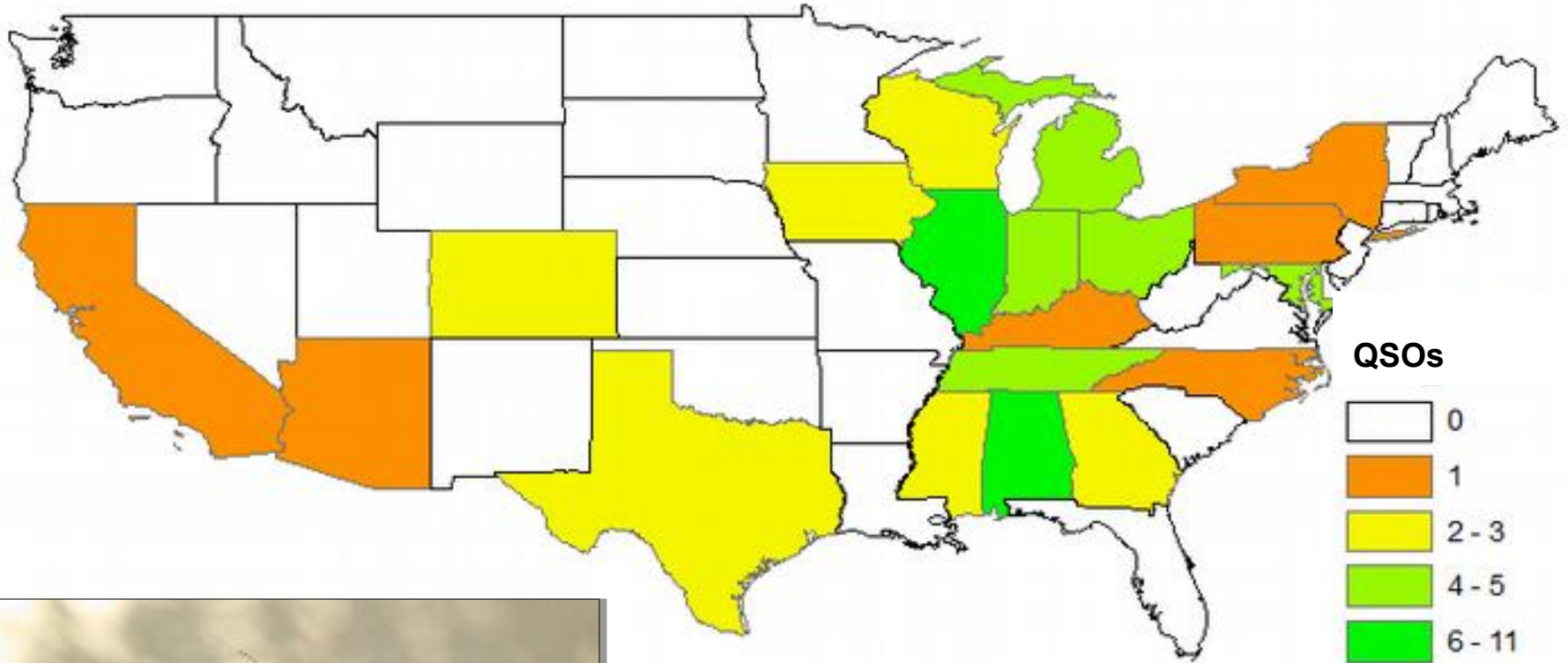
# W0GS Field Day = 40m SSB QSOs



**16 SSB  
QSOs  
10 States**



# W0GS Field Day = 80m SSB QSOs



**50 SSB  
QSOs  
19 States**



# ADS-B

- Did you try it?
- Other SDR exploration?
- FlightAware Stats
- Joe's Stats

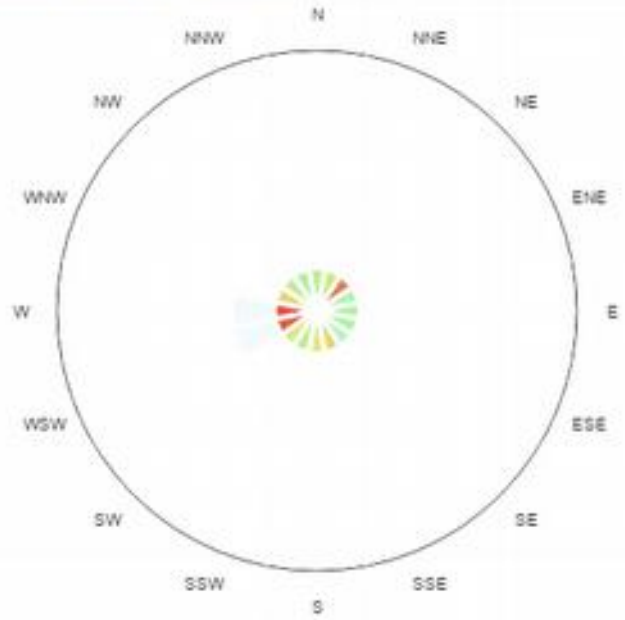




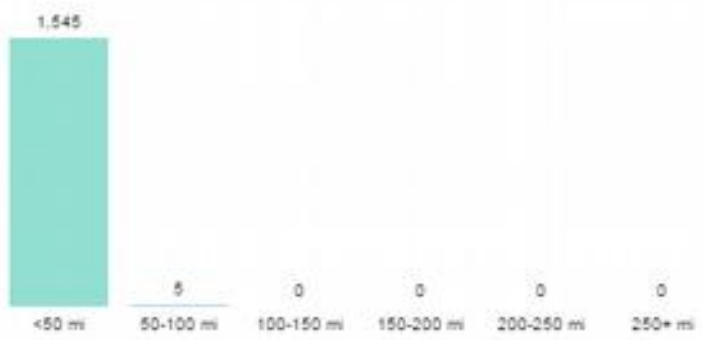
# ADS-B (FlightAware)

## Coverage Distribution

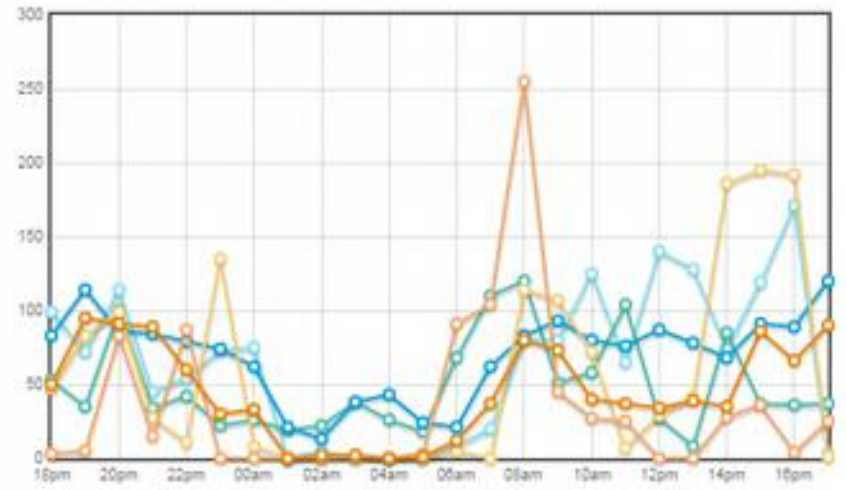
Show position distribution for:



## Positions Reported by Distance from Receiver

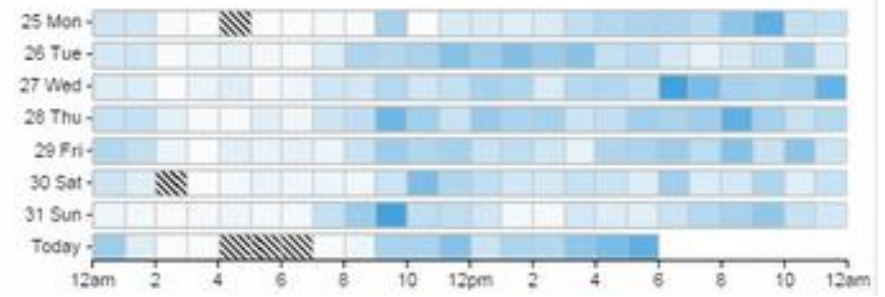


## Hourly Collection Graphs (CDT)



- ADS-B Positions Reported Last 24 Hours = 69
- ADS-B Positions Reported Trailing 24 hours = 57
- ADS-B Positions Reported Trailing 7 days (Average) = 65
- MLAT Positions Reported Last 24 Hours = 52
- MLAT Positions Reported Trailing 24 hours = 39
- MLAT Positions Reported Trailing 7 days (Average) = 40

## Hourly Received Reports (positions | aircraft)

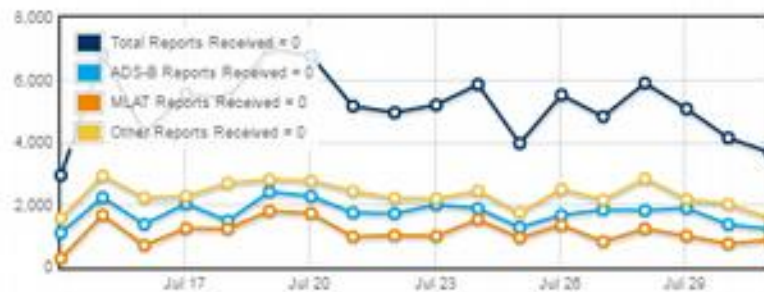




# ADS-B (FlightAware)

	Mon 08/01	Sun 07/31	Sat 07/30	Fri 07/29	Thu 07/28	Wed 07/27	Tue 07/26	Mon 07/25	Sun 07/24	Sat 07/23	Fri 07/22	Thu 07/21	Wed 07/20	Tue 07/19	Mon 07/18
<b>Reports Received</b>															
ADS-B	1,451	1,222	1,373	1,897	1,827	1,850	1,670	1,284	1,885	2,009	1,725	1,750	2,280	2,423	1,489
MLAT	1,312	882	756	1,006	1,236	825	1,354	948	1,532	1,000	1,024	981	1,728	1,805	1,230
Other	2,018	1,581	2,025	2,183	2,850	2,162	2,507	1,747	2,451	2,203	2,217	2,444	2,778	2,816	2,702
<b>Total</b>	<b>4,781</b>	<b>3,685</b>	<b>4,154</b>	<b>5,086</b>	<b>5,913</b>	<b>4,837</b>	<b>5,531</b>	<b>3,979</b>	<b>5,868</b>	<b>5,212</b>	<b>4,966</b>	<b>5,175</b>	<b>6,786</b>	<b>7,044</b>	<b>5,421</b>
<b>Aircraft Seen</b>															
ADS-B	123	114	113	153	150	143	158	103	156	173	156	136	193	197	123
MLAT	78	56	56	72	92	65	97	59	94	68	74	76	119	120	82
Other	100	83	122	104	137	105	107	98	101	119	118	122	106	97	138
<b>Total</b>	<b>301</b>	<b>253</b>	<b>291</b>	<b>329</b>	<b>379</b>	<b>313</b>	<b>362</b>	<b>260</b>	<b>351</b>	<b>360</b>	<b>348</b>	<b>334</b>	<b>418</b>	<b>414</b>	<b>343</b>

## Daily Collection Graphs (UTC)



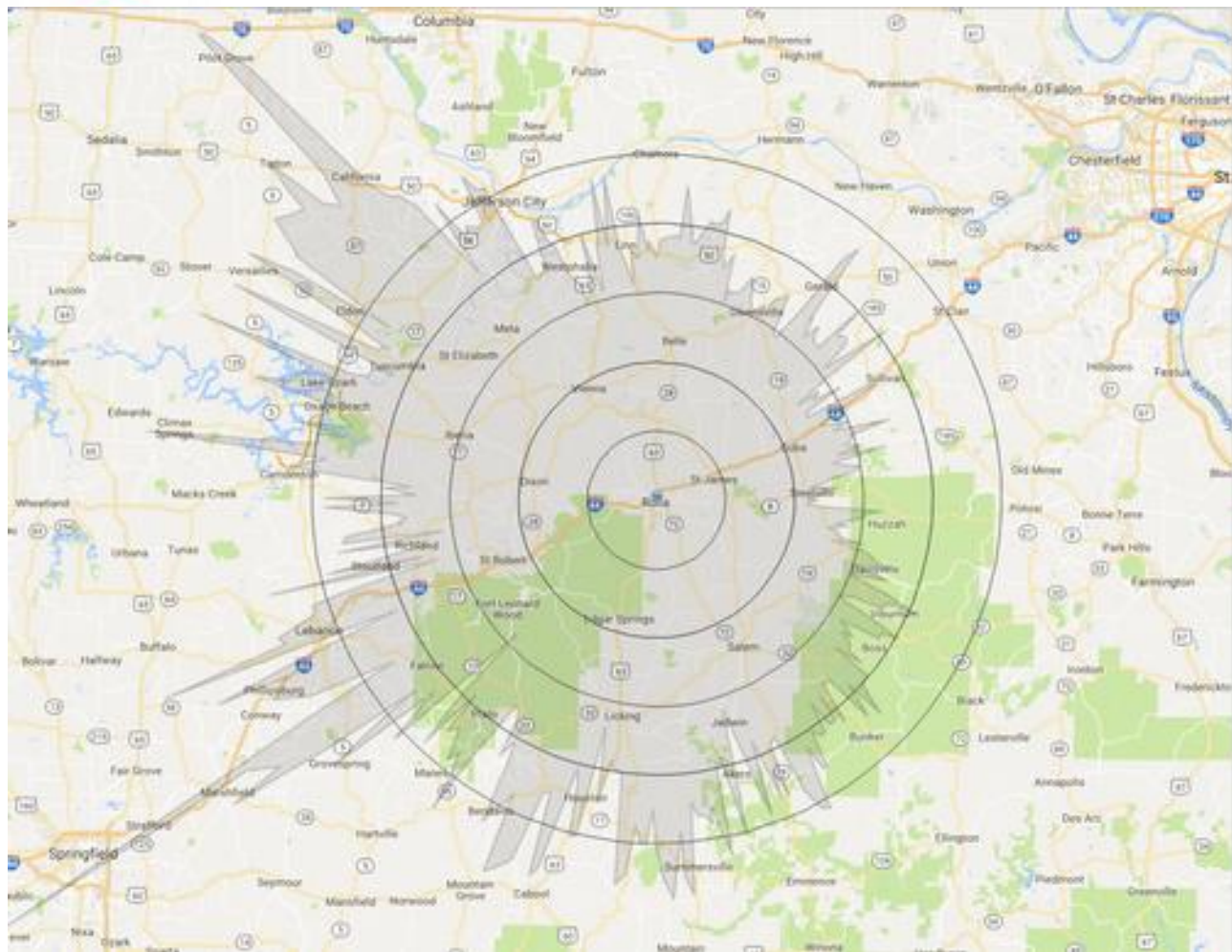


# ADS-B (FlightAware)

Recent flights with positions from this feeder on FlightAware.com									
Flight	Tail Number	Type	Seconds Ago	Ground Speed	Altitude	Heading	Distance	Origin	Destination
<a href="#">SKW5587</a> (tracklog)	<a href="#">N148SY</a>	<a href="#">E75L</a>	631	456	31,000	39°	20	General Mariano Escobedo Int'l ( <a href="#">MTY/</a> <a href="#">MMMY</a> )	Chicago O'Hare Int'l ( <a href="#">KORD</a> )
<a href="#">UPS2984</a> (tracklog)	<a href="#">N290UP</a>	<a href="#">MD11</a>	804	479	37,975	268°	22	Louisville Int'l ( <a href="#">KSDF</a> )	Ontario Int'l ( <a href="#">KONT</a> )
<a href="#">SWA1116</a> (tracklog)	<a href="#">N7746C</a>	<a href="#">B737</a>	991	453	36,000	218°	21	General Mitchell Int'l ( <a href="#">KMKE</a> )	Dallas Love Field ( <a href="#">KDAL</a> )
<a href="#">ENY3589</a> (tracklog)	<a href="#">N228NN</a>	<a href="#">E170</a>	1030	457	35,000	43°	21	Dallas-Fort Worth Int'l ( <a href="#">KDFW</a> )	Gerald R Ford Int'l ( <a href="#">KGRB</a> )
<a href="#">N7883V</a> (tracklog)	<a href="#">N7883V</a>	<a href="#">M20P</a>	1038	115	6,400	256°	21	Spirit of St Louis ( <a href="#">KSUS</a> )	
<a href="#">RPA3306</a> (tracklog)	<a href="#">N721YX</a>	<a href="#">E170</a>	2336	444	35,000	47°	26	Dallas-Fort Worth Int'l ( <a href="#">KDFW</a> )	Newark Liberty Int'l ( <a href="#">KEWR</a> )
<a href="#">UPS2592</a> (tracklog)	<a href="#">N149UP</a>	<a href="#">A306</a>	3050	473	33,975	274°	31	Louisville Int'l ( <a href="#">KSDF</a> )	Billings Logan Int'l ( <a href="#">KBI</a> )
Additional recent flights fed to FlightAware									
Flight	Tail Number	Type	Seconds Ago	Ground Speed	Altitude	Heading	Distance	Origin	Destination
<a href="#">DCM4121</a> (tracklog)	<a href="#">N1848T</a>	<a href="#">LJ45</a>	2473	416	40,950	189°	23	Quincy Rgnl-Baldwin Field ( <a href="#">KUIJ</a> )	William P Hobby ( <a href="#">KHOU</a> )
<a href="#">AA12319</a> (tracklog)	<a href="#">N382AN</a>	<a href="#">B763</a>	377		37,025		21	Dallas-Fort Worth Int'l ( <a href="#">KDFW</a> )	Chicago O'Hare Int'l ( <a href="#">KORD</a> )
<a href="#">RPA4670</a> (tracklog)	<a href="#">N447YX</a>	<a href="#">E170</a>	3153	417	28,300	236°	18	LaGuardia ( <a href="#">KLGA</a> )	Northwest Arkansas Rgnl ( <a href="#">KXNA</a> )
<a href="#">AA150</a> (tracklog)	<a href="#">N724AN</a>	<a href="#">B77W</a>	235	497	32,975	46°	17	Dallas-Fort Worth Int'l ( <a href="#">KDFW</a> )	London Heathrow ( <a href="#">LHR/</a> <a href="#">EGLL</a> )
<a href="#">AA12328</a> (tracklog)	<a href="#">N878NN</a>	<a href="#">B738</a>	891	456	35,000	49°	24	Dallas-Fort Worth Int'l ( <a href="#">KDFW</a> )	Boston Logan Int'l ( <a href="#">KBOS</a> )
<a href="#">N901SB</a> (tracklog)	<a href="#">N901SB</a>	<a href="#">E900</a>	789	437	27,725	55°	25	Dallas Love Field ( <a href="#">KDAL</a> )	Lambert-St Louis Int'l ( <a href="#">KSTL</a> )
<a href="#">AA1231</a> (tracklog)	<a href="#">N950NN</a>	<a href="#">B738</a>	1825	466	36,975	46°	23	Dallas-Fort Worth Int'l ( <a href="#">KDFW</a> )	Philadelphia Int'l ( <a href="#">KPHL</a> )



# ADS-B (Joe's Demo)



**N447YX** **A566DA**

**American Eagle**  
**United States**  
**Embraer EMB-175 200LR**

Altitude: 33000 ft | Vertical Speed: 64 ft/min | Speed: 317.7 mph | Heading: 56.2° | Distance: 16.47 mi | Squawk: | Engines: Twin jet | Species: Landplane

Time Tracked: 00:55 | Avg. Signal Level: 131 | Transponder: ADS-B v1 | Message Count: 54

Route: Route not known



[www.airport-data.com](http://www.airport-data.com) | [www.airbrns.net](http://www.airbrns.net) | [www.airframes.org](http://www.airframes.org)  
Show on map | Disable auto-select

Tracking 3 aircraft

Reg.	Route	Distance	Alt & VR	Speed	Avg Sig	Magn.	Transponder	Flags
N416LR	A679C		25000 ft		97	216	Mode-S	
N472WR	A5CAB9		41000 ft		135	141	Mode-S	
N419WH	A4F79D		39000 ft		68	6	Mode-S	

Powered by Virtual Radar Server



# Fox Hunt

- **Who:** Anyone with or without amateur license (teams permitted)
- **When:** 2 - 4pm September 24<sup>th</sup>
- **Where:** Rolla City Limits + 1 mile
- **Frequency:** 146.000 MHz
- **Transmit:** 1 minute every 15 minutes:
  - 0 - 60 minutes: 65 watts
  - 61 - 90 minutes: 35 watts
  - 90 - 110 minutes: 10 watts
  - 111 - 120 minutes: 5 watts

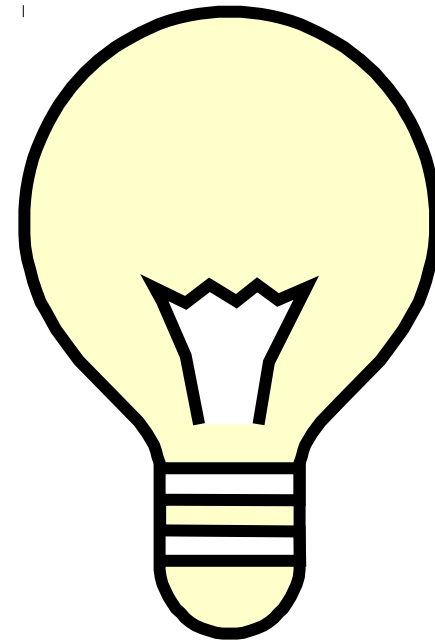






# Announcements

- New Business
- Announcements
- Ideas





# Calendar/ Events/ Ideas 2016

January

February Test Session – Saturday 27th

March Spotter Training – Thursday 3rd (6:30pm - 8:30pm)  
100 Acre Wood – 18–19th

April Joint meeting w/ LARC (in Waynesville)

May Test Session – Saturday 7th

June Hellbender?, Field Day (Test Session at ~2:30)

July

August Test Session – Saturday 27<sup>th</sup>

September Fox Hunt?, Berryman Adventure Race

October Repeater work day - Hancock

November Ozark Trails 100

December Club Elections, Test Session – Saturday 3<sup>rd</sup>



# Summer Break!



Next meeting: September 12<sup>th</sup>



# Meeting Notes

*Dave Bridges talked about his APT weather receiver vs his RTL-SDR weather receiver.*

*Shawn Bleiler inquired about club participation in Winter Field Day, which is the last weekend in January.*