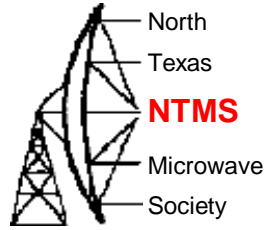


KM5PO-KI5EMN 2022 10 GHz and Up Rove

2nd contest weekend results
Sept. 17 & 18

Second weekend

EM02hq

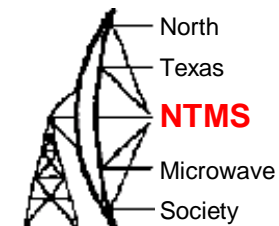


**Dashes!
KI5EMN**

**No dashes!
KM5PO**

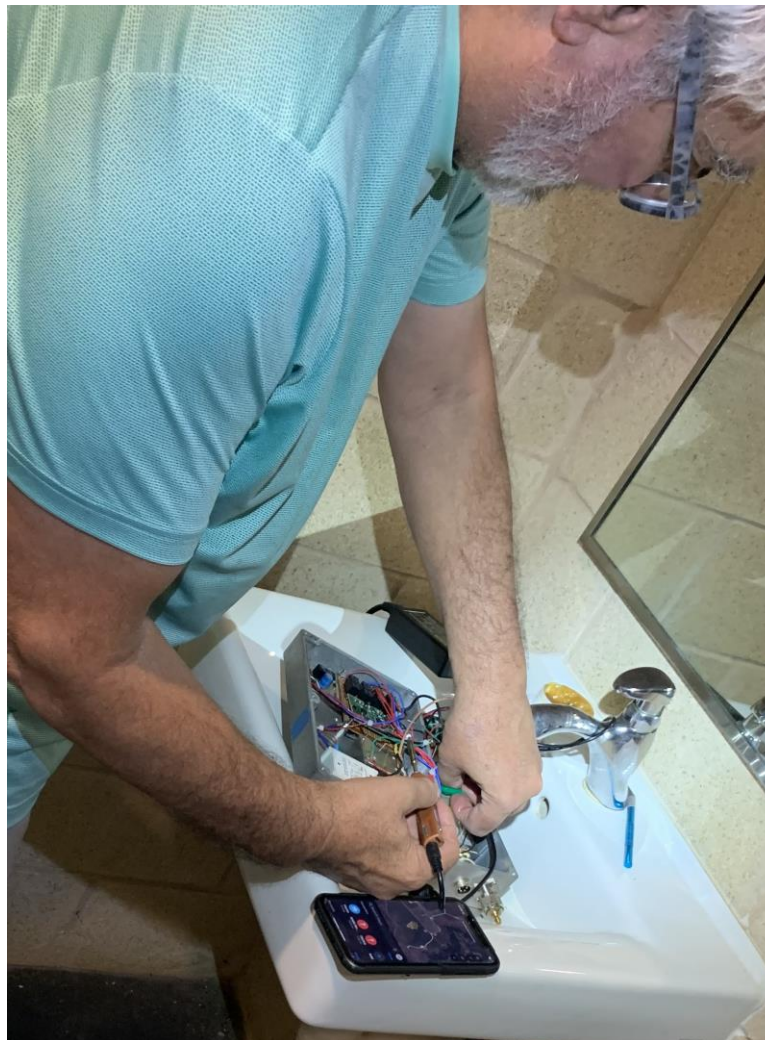
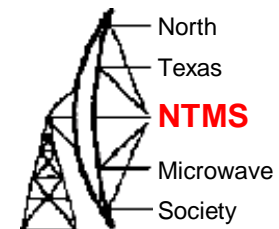


Troubleshooting

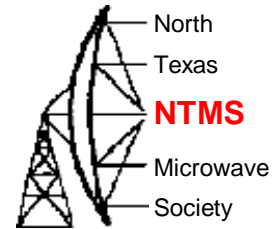


- A change made 48 hours before contest set the stage for Saturdays confusion
 - During testing of WSS – the 10 GHz wss sig was heard to whoop just like Denton beacon observation !%\$?
 - Coupling shop 10 MHz ref to 10 GHz transverter fixed behavior, decided to couple OCXO for 24 GHz to 10.
 - Levels were not measured but behavior was normal/fixed after this change
 - Saturday morning – no dashes heard on 10 GHz at KM5PO/R. Whaaa?
 - Decided to reverse the recent change one step at a time. This was spread out all day doing a little at each stop
 - At EM02jw-Ft Griffith, found A/C in the visitors rest stop and soldered on cable from on board OCXO in 10 GHz transverter
 - At EM03mg-Elbert, still no dashes, suspecting LNA blowout
 - At EM03pj-Olney, bypassing LNA still no dashes working
 - At EM03rf-Loving, suspecting T/R relay but it ohms out ok
 - At EM03vg-Jacksboro, suspecting feedline or feedhorn, substituted Pauls feedline & feedhorn = dashes heard woohoo
 - At EM03vn-Joy (last stop) tried to find all missing nuts and bolts and head for the hotel.
 - At Gainesville hotel room 11 pm – found intermittent feedline SMA connection because we could hear the beacon during testing. Paul carefully bent the center conductor of the male SMA and we verified good connection.
 - Sunday morning-AI is loud on 24 GHz but can't hear us @ EM13nl-Tioga
 - At EM13ts-Hendrix, found that latching T/R relay not working on 24 GHz
 - At EM23aw-Bennington, repurposed 24v IF steering relay to 24 GHz T/R relay duty
 - At EM23ea-Soper, met up with Brad
 - At EM23ao-Honeygrove, discovered 24v relay was not switching – could hear AI on 24 GHz during my xmit qsk breaks
 - At EM13wh-Celeste, put 2 – 12v batteries in series and manually (using clip lead) switched 24 GHz T/R. Completed contact on 24 GHz with AI, W5LUA

Fix it in a sink

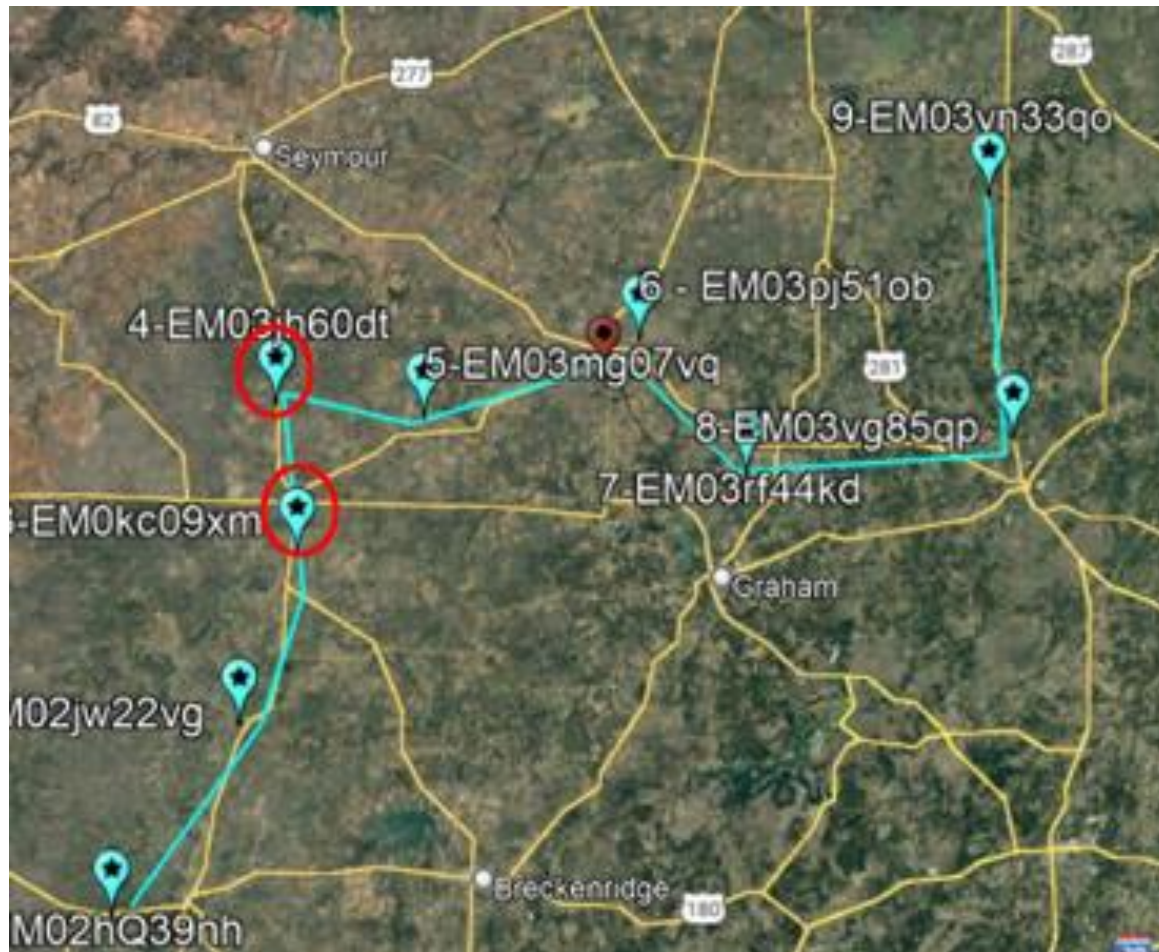
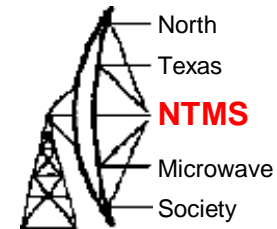


13 Activations

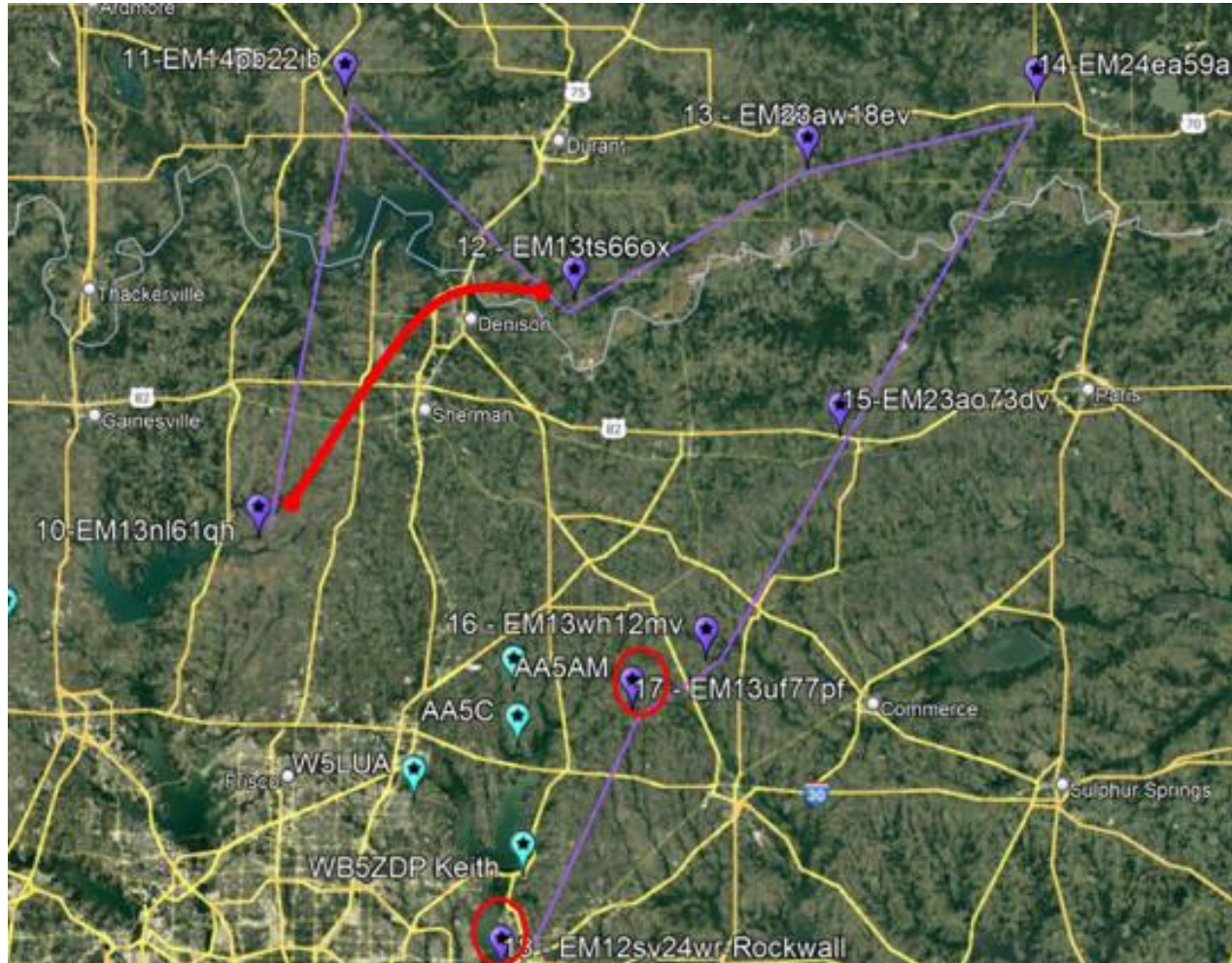
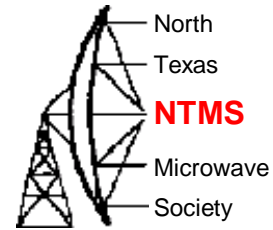


Site		W5LUA				AA5C			AA5AM			WASTKU			W5AFY			WB5ZDP			
		EM13qc68				EM13se55			EM13sg53			EM13ii80			EM04id40			EM13sa64			
		Alt	DX	DX AZ	AZ	DX	DX AZ	AZ	DX	DX AZ	AZ	DX	DX AZ	AZ	DX	DX AZ	AZ	DX	DX AZ	AZ	
Saturday 09/17/2022																					
1	EM02hq39nh	Albany, TX W 5 mi on 180 picnic area	1820	263	261	81	280	260	80	280	258	78	210	251	71	159	183	3	278	264	84
2	EM02jw22vg	Ft Griffith Albany, TX N ~10 m on 283	1305	245	266	86	261	264	84	261	263	83	189	257	77	134	177	357	260	269	89
3	EM03kc09xm	Throckmorton, TX S 5 m X-Hwy 283 & CR 923	1411	236	271	91	251	269	89	252	267	87	176	262	82	115	174	354	252	273	83
4	EM03jh60dt	Throckmorton, TX N 10 m X Hwy 283 & CR130	1398	241	276	96	255	274	94	255	271	91	178	268	88	95	175	355	257	278	98
5	EM03mg07vq	Elbert, TX N 1 m on 440	1180	222	275	95	237	273	93	236	271	91	161	268	88	98	163	343	239	278	98
6	EM03pj51ob	Olney, TX E 2 m on 114	1211	197	279	99	210	276	96	209	274	94	134	272	92	100	146	326	214	281	101
7	EM03rf44kd	Loving, TX SW few m off 16 on RedTop Cem Rd	1229	180	274	94	195	271	91	195	269	89	120	264	85	122	145	326	198	277	97
8	EM03vg85qp	Jacksboro, TX N ~4 mi on 148	985	147	277	97	161	274	94	160	271	91	85	265	85	140	132	312	165	280	100
9	EM03vn33qo	Joy, TX S ~1 m X of Hwy 148 & 174	1101	157	288	109	169	284	104	167	282	102	92	286	106	118	122	302	175	290	110
Sunday 09/18/2022																					
10	EM13nl61qh	Tioga (377) E 3 mi on 121	691	45	329	149	49	309	129	44	301	121	40	69	249	237	107	287	63	322	142
11	EM14pb22ib	Between Madill/Kingston	794	104	354	174	99	345	165	91	344	164	93	32	212	236	91	271	118	347	167
12	EM13ts66ox	Kemp, OK NW .5 mi Peanut Trail Rd	651	77	18	198	66	7	187	58	8	188	97	60	240	273	99	279	85	5	185
13	EM23aw18ev	Bennington, OK SE 2 mi E2110 Jackson Cem	632	109	32	212	96	27	207	88	29	209	137	60	240	306	95	275	112	22	202
14	EM24ea59ar	Between Soper/Hugo, OK X-Hwy 271 & 70	559	138	42	222	121	39	219	116	42	222	170	62	242	339	91	271	137	33	213
15	EM23ao73dv	Honey Grove, TX W off Hwy 82 - loud here	683	83	50	230	66	46	226	61	52	232	126	76	256	315	102	281	80	36	219
16	EM13wh12mv	Celeste, TX E 1.5 m X of CR1027 & CR1019	700	48	64	244	31	66	246	29	81	261	103	92	272	302	108	288	42	41	221
17	EM13uf77pf	Merit, TX NNE 2 m near X of CR 1101 & CR 110	723	35	67	247	18	72	252	18	99	279	93	97	277	297	110	290	30	33	213
18	EM12sv24wr	Rockwall, TX	562	28	146	326	32	180	0	42	180	0	93	124	304	297	119	299	14	180	0

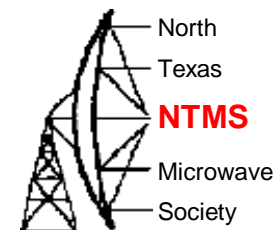
Saturday 9-17-22



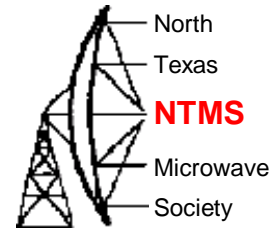
Sunday 9-18-22



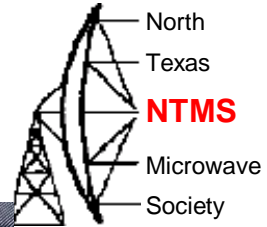
Ft. Griffith TX – EM02jw



Olney TX – EM03pj



Kemp OK – EM13ts

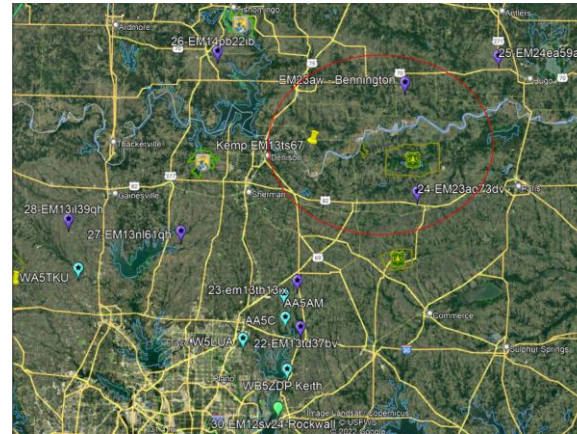
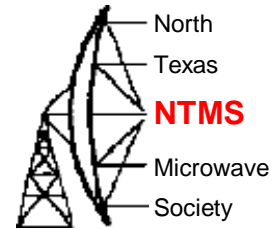


Armpit copy... up high to clear fence



Ohming out 24 GHz T/R relay

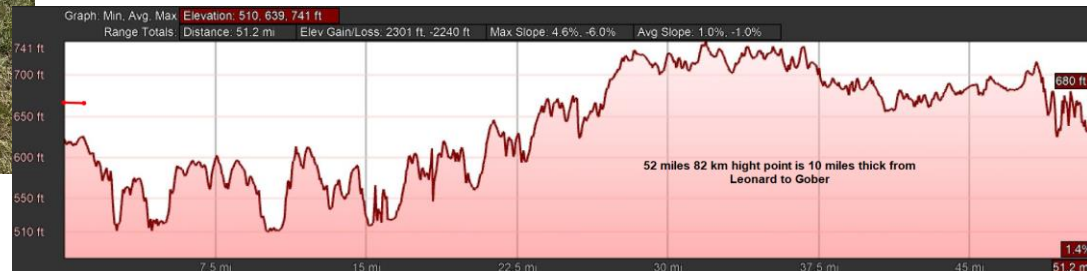
Near Bennington OK – EM23aw18cv



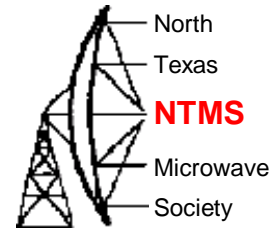
W5LUA to Bennington OK EM23aw18cv



W5LUA to Honeygrove OK EM23ao



Celeste TX – EM13wh

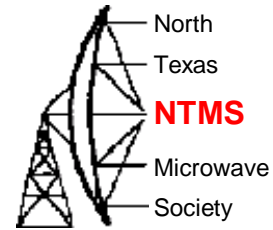


Manual T/R relay operation for 24 GHz



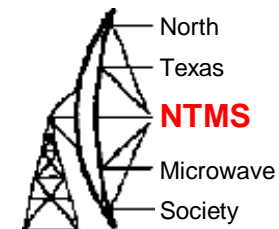
Paul KI5EMN on 10 GHz

Upgraded equipment observations



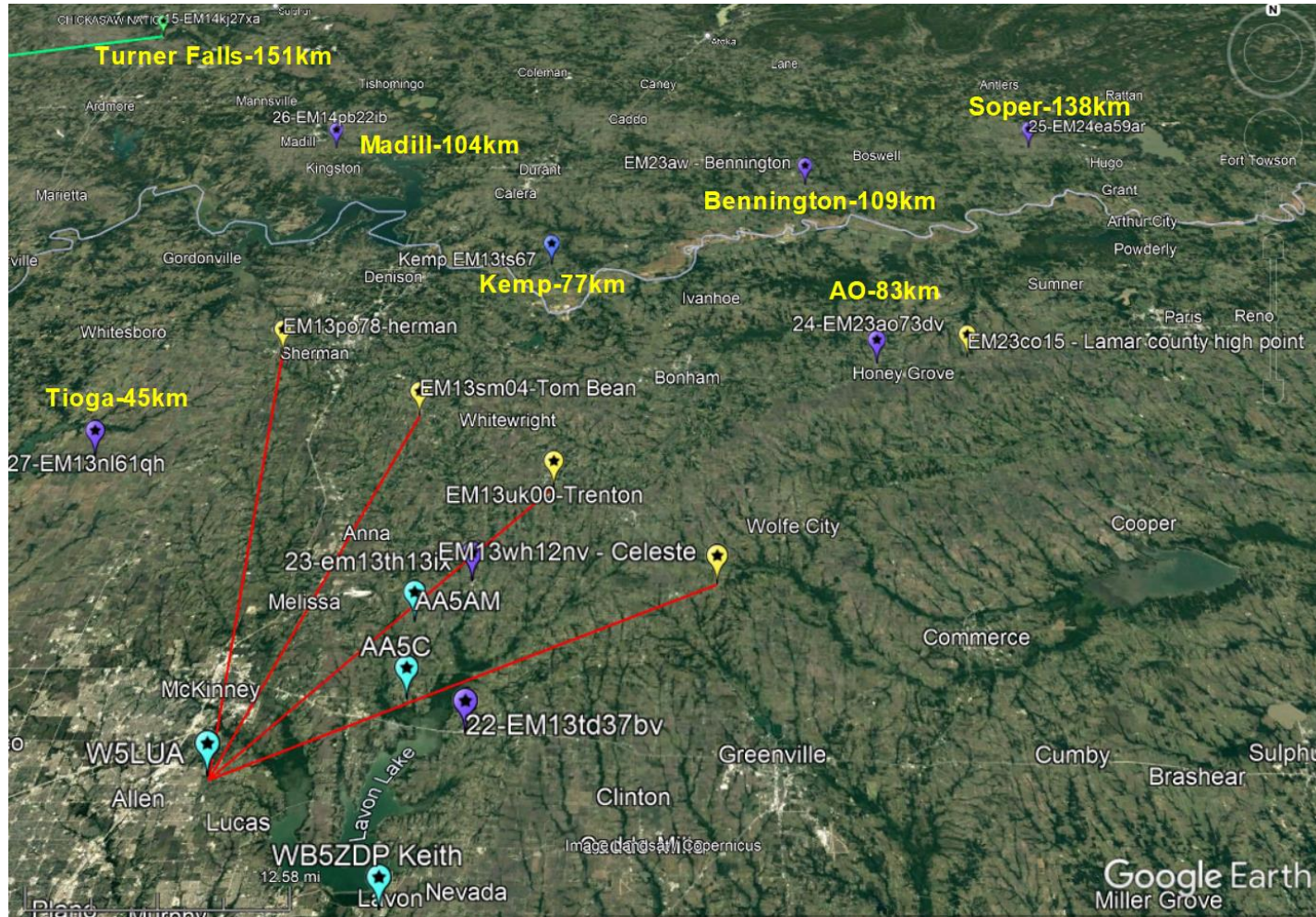
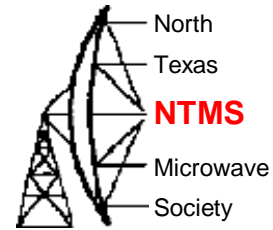
- Paul's new IF rig (FT290) enabled easier frequency identification
 - He used earbuds at loud ambient noise locations
- Jim's new IF rig (KX3/PX3) helped reduce footprint of gear
 - Found that the KX3 would turn off preamp in presence of strong signal (KI5EMN)

Next up

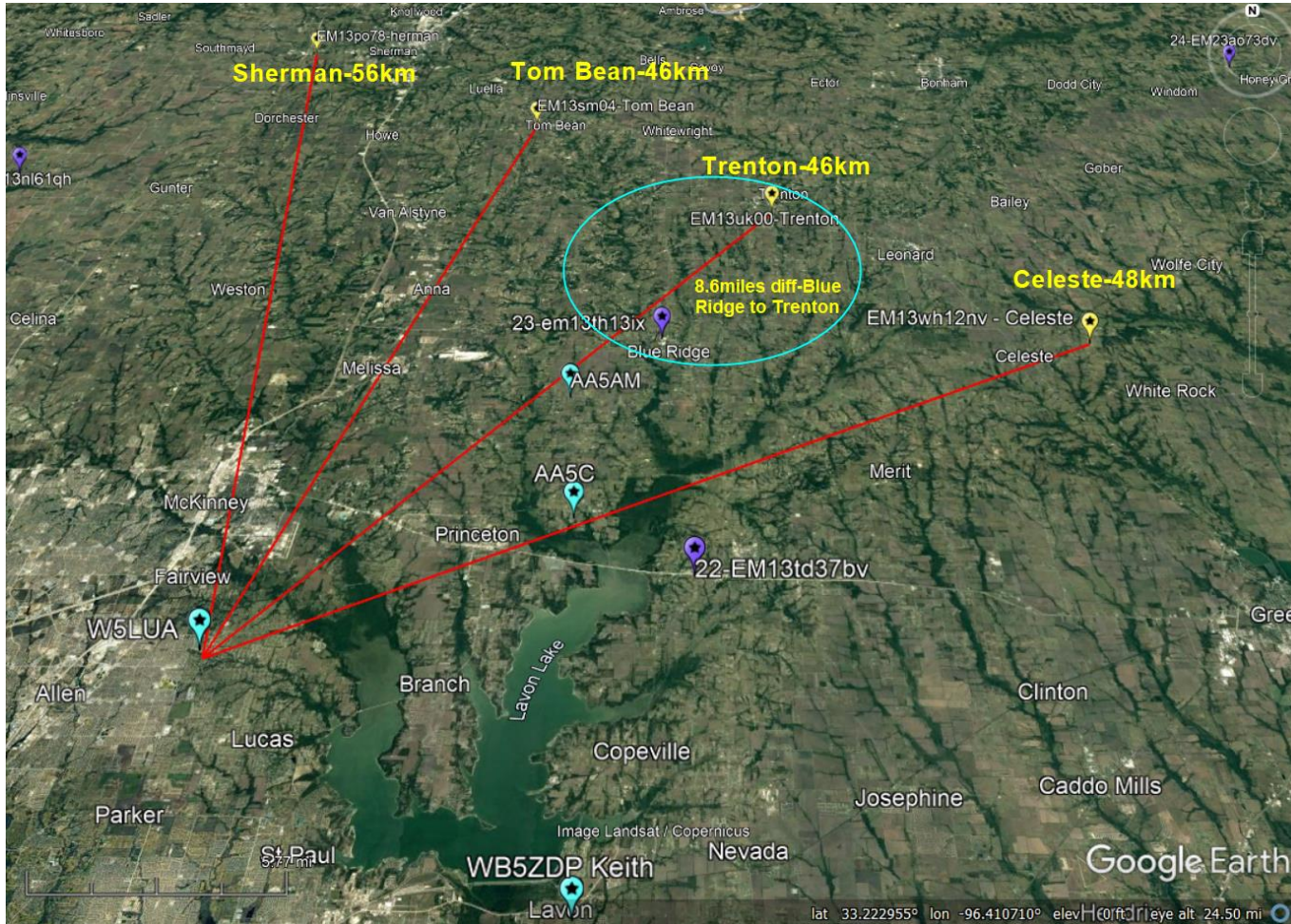
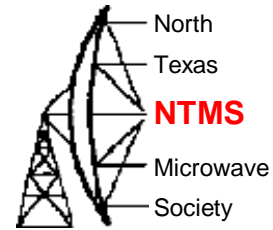


- Working on Paul 24 GHz setup
 - KI5EMN
 - Adopt the retuned DB6NT transverter from KM5PO
 - Integrate offset dish and dual band feed horn
 - KM5PO
 - Install new DB6NT transverter (terrestrial)
 - Add digital (WSJT)
 - Start building 47 GHz rover system
- Vet new activation spots found with Google Earth Pro

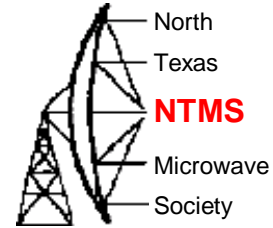
4 locations+others



4 locations



Profiles



Questions?

