

Building a POTA SOTA Go-Kit using the Lab599 TX-500 all HF band / all mode transceiver

N5GG – Colin Buckup
9/25/23



Lab599 TX-500 transceiver



Software-Defined Radio



General coverage receiver
0.5 – 56 MHz



Adjustable output power
1–10W



Digital Hi-Performance Filtering
(4 receive, 2 transmit)



48 kHz Build-in Hi-Speed
Panadapter



I/Q Output

The Kit

- Transceiver
- 3Ah LiFePo battery
- Compact CW key
- Headphones
- 23 ft croppy fishing pole – collapsible
- Vertical antenna + 4 radials (resonant)
- Bal-Un 1:1
- 25-50 ft RG316 50 ohm coax
- DIY pole holder
- 4 tent pegs
- DIY top holder
- Assorted cables
- Assorted RF connectors
- Assorted length of twine
- Logbook + pen
- Backpack to fit it all





DIY pole holder

- 1 ft of PVC pipe
- 1 long screw tent peg
- 1 JB-Weld Steel-Stick



DIY top holder

- 1 bamboo skewer
- 1 small carabiner
- 3 small zip-ties



DIY antenna ending

- 1 keyring
- 10 in plastic strap
- 18 AWG antenna cable



Antenna

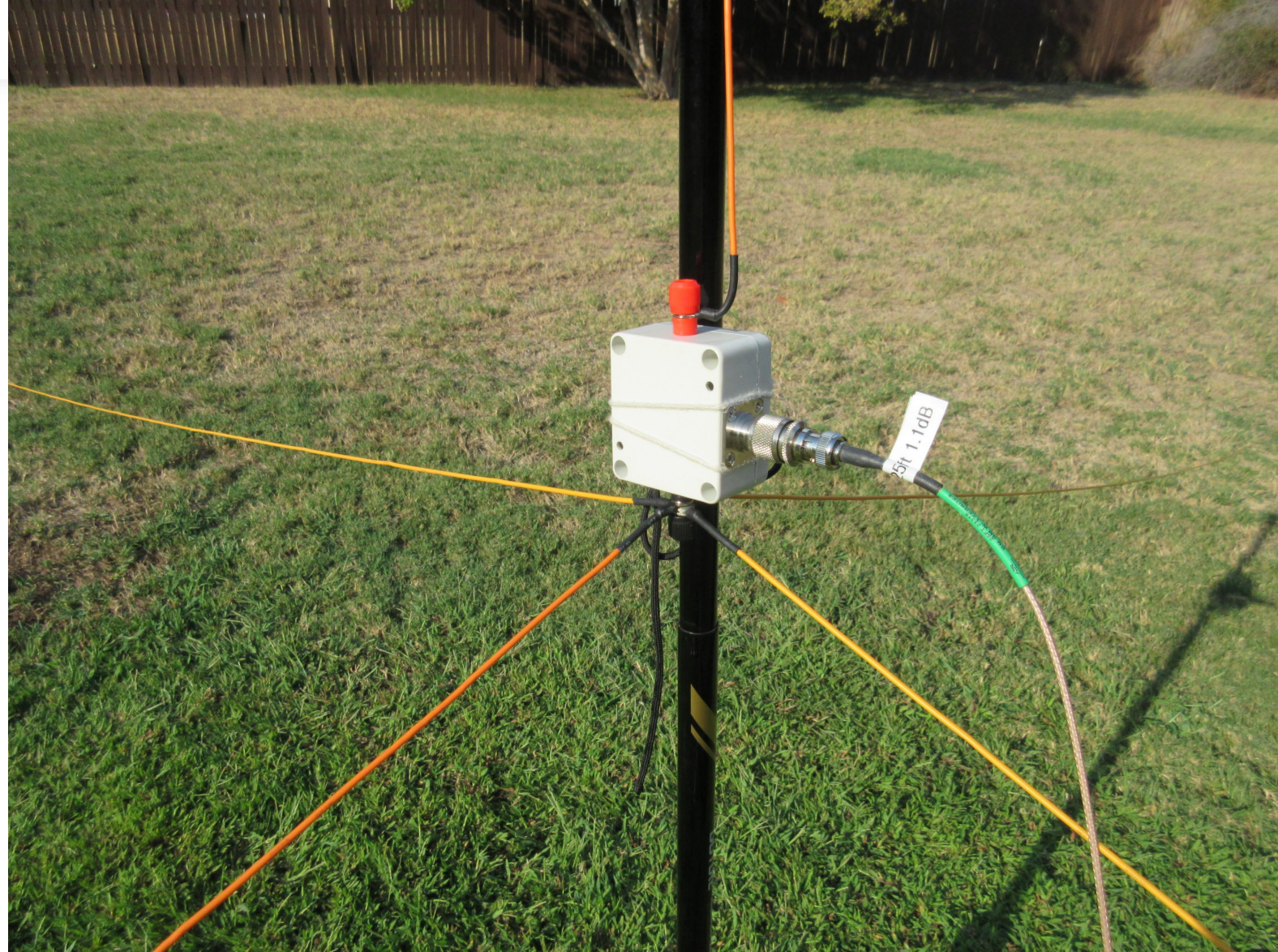
I used my resonant 20m dipole and added 3 extra radials, so I have 1 vertical element and 4 radials, all of same length. Achieved 1.2:1 SWR, no tuner needed.

Same principle valid for any other band.



Antenna / BALUN / Pole

- Insert pole into holder
- Secure BALUN to pole
- Attach driven element and radials
- Attach coax
- Extend pole
- Spread radials and secure with pegs



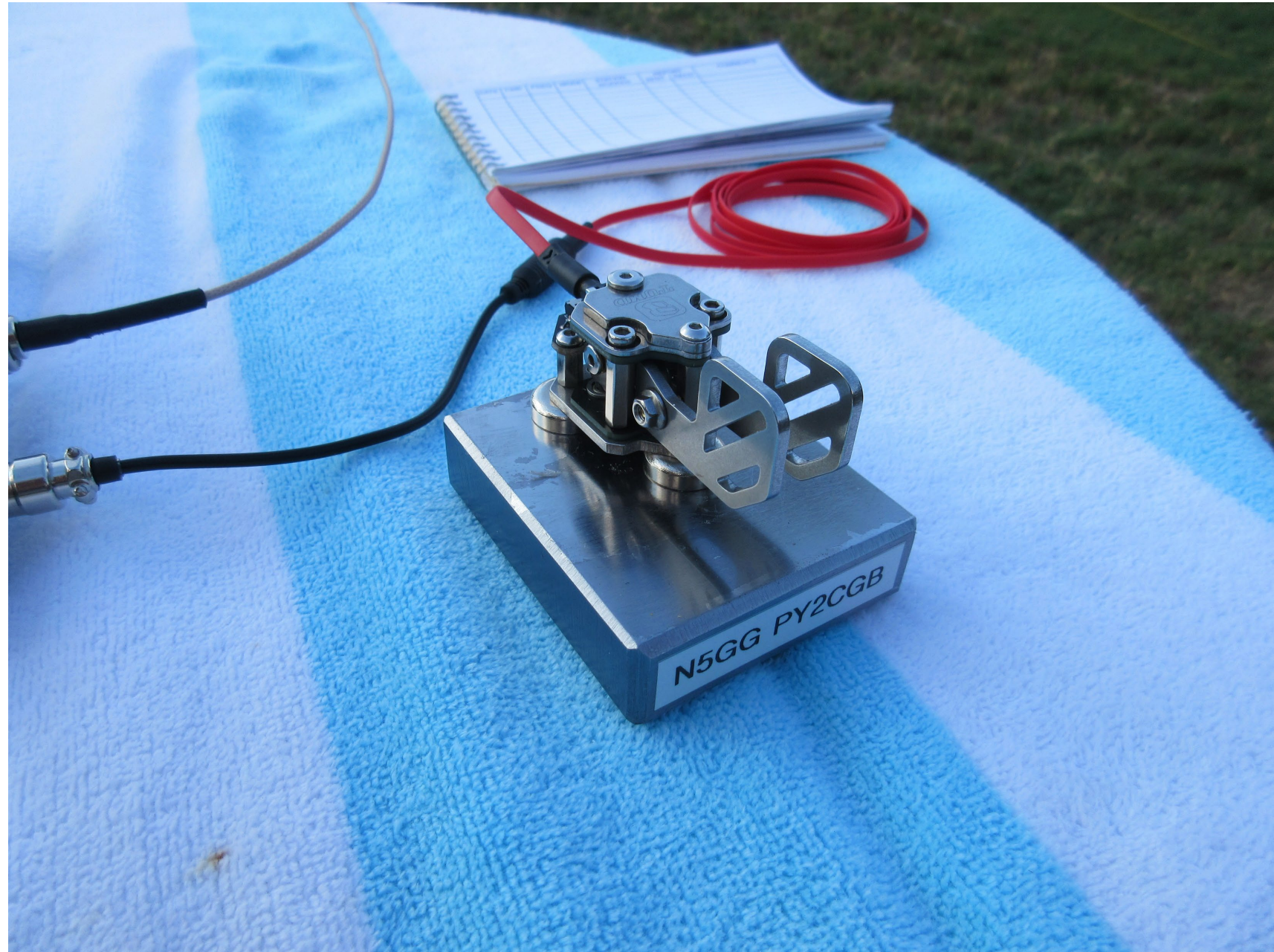
Antenna is up and running



All bits and pieces on the table



Key
attached
to heavy
base
(magnets)



Begin Operation



In full swing



Several QSOs later...



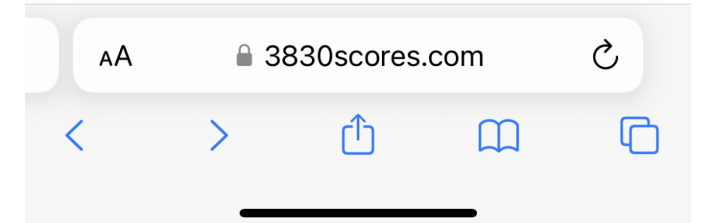
8:09 5G

IN0RVV	20	23	1	396 LICW
K9EI	34	17	1	578 SMC
K6PB	31	18	0:50	558
WG4V	24	21	1	504 NFARL
WB7S	25	20	1	500 LICW
KD2KW	24	20		480 LAARK
VE3FP	26	18	0:28	468
W7DLR	24	18	1	432 LICW
WI0WA(BUGS)	26	16	1/2	416 IaDXCC
AF4PX	29	14	00:35	406 SECC
AB6BR	24	15		360
W5RES	21	16	1	336
KD9RKG	19	16	1	304
N5FZ	21	14		294 LICW
N2EI	15	15	.5	225
AE5EZ	12	12		144 Lewisville
WS5D	12	11	0.4	132
NK4O	11	11	.5	121 FCG
KN4SYO	9	9	0.75	81 LICW
W0ADL	8	8		64 MWA
KB7YS	2	2	1	4

Single Op QRP

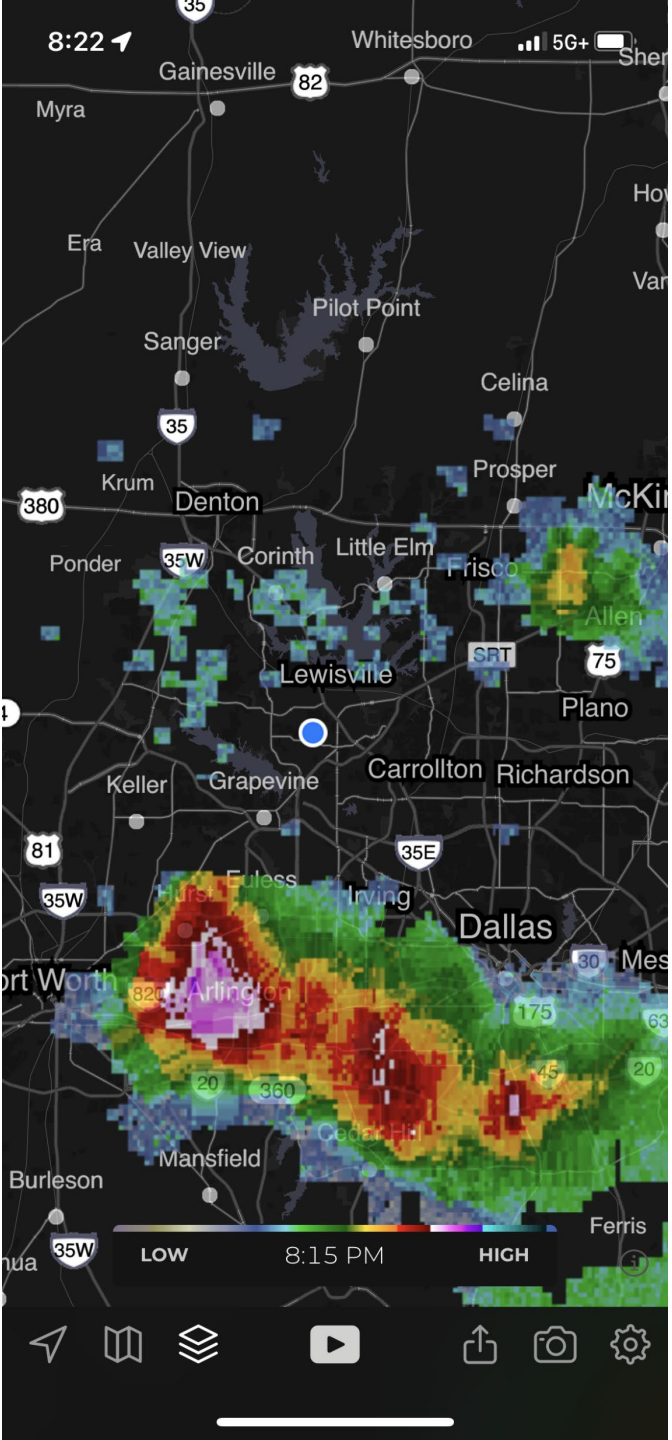
Call	OpMode	Remote	QSOs	Mults	Op Time	Score	Club
K4PQC			41	30		1,230	NFARL
NQ2W			32	26	1	832	HVCDX
N5GG			22	18	1:00	396	DFWCG
N6HI			14	7	1/2 Watt	98	AOCC
KF0HLA			7	7		49	
KB5QHO			6	5	1	30	
VA2NW			5	5		25	

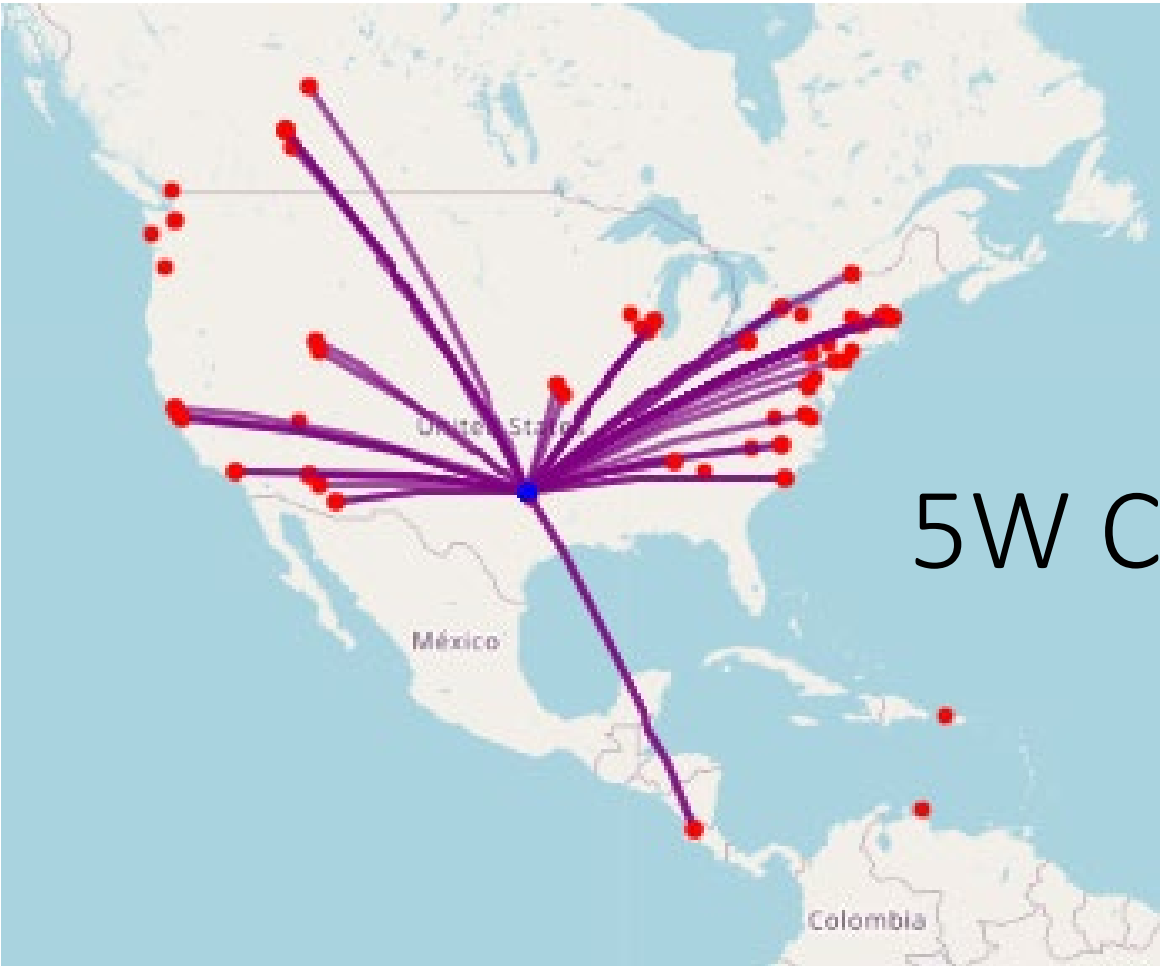
comments and corrections about this page to [Bruce](#)
 Revision Date: March 31, 2013 Revision
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[October 31, 2019 Site Privacy Statement](#)



Better to pack it all up!

Texas weather is approaching...





5W CW

spotted	distance mi
🇺🇸 N5GG	1214 mi
🇺🇸 N5GG	994 mi
🇺🇸 N5GG	1424 mi
🇺🇸 N5GG	1564 mi
🇺🇸 N5GG	909 mi
🇺🇸 N5GG	605 mi
🇺🇸 N5GG	1563 mi
🇺🇸 N5GG	1057 mi
🇺🇸 N5GG	1718 mi
🇺🇸 N5GG	1534 mi
🇺🇸 N5GG	1458 mi
🇺🇸 N5GG	800 mi
🇺🇸 N5GG	1563 mi
🇺🇸 N5GG	821 mi
🇺🇸 N5GG	1040 mi
🇺🇸 N5GG	773 mi
🇺🇸 N5GG	1056 mi
🇺🇸 N5GG	1448 mi
🇺🇸 N5GG	867 mi
🇺🇸 N5GG	1483 mi
🇺🇸 N5GG	1193 mi
🇺🇸 N5GG	1154 mi
🇺🇸 N5GG	1534 mi
🇺🇸 N5GG	1214 mi
🇺🇸 N5GG	1513 mi
🇺🇸 N5GG	1024 mi
🇺🇸 N5GG	1627 mi
🇺🇸 N5GG	1056 mi
🇺🇸 N5GG	773 mi
🇺🇸 N5GG	1211 mi
🇺🇸 N5GG	1543 mi
🇺🇸 N5GG	1534 mi
🇺🇸 N5GG	1040 mi
🇺🇸 N5GG	1458 mi
🇺🇸 N5GG	1456 mi
🇺🇸 N5GG	1424 mi

Reverse Beacon Network – 20m @ 00 UTC

SST 00Z
09/25/23
N5GG QRP

K1USN Slow Speed Test 2023 Sep 25 Claimed Score

Click on a call below for a list of all the contests for which that call sign is li

Call: **N5GG**
Operator(s): N5GG
Station: N5GG

Class: **Single Op QRP**
QTH: NTX
Operating Time (hrs): 1:00
Location: USA

Summary: [Compare Scores](#)

Band	QSOs	Mults
160:		
80:		
40:		
20:	22	18
15:		
10:		
Total:	22	18

Total Score **396**

Club: DFW Contest Group

Comments: [\[email\]](#) 2023-09-25 01:07:44

This was fun!
Operating from a park bench, QRP into a fishing pole vertical.
Sun going down and no flash light..
Whole log on napkins..
72 all around and thanks for the Qs
Colin N5GG

Thank You!

