

# My Impressions of the COMPACTenna 20/40 MICRO HF Antenna

By Tom, N8FDY

Before I talk about the COMPACTenna 20/40 MICRO HF, I want to give you some history about how I discovered COMPACTenna.

I discovered COMPACTenna when I attended a West Park Radiops Amateur Radio Club meeting on Friday, February 21, 2020, and saw a presentation by Dr. Jack Nilsson, N8NDL. He covered many topics including science, technology, philosophy, and creativity. Dr. Jack also talked about his antenna innovations. I was fascinated by his presentation, and I decided the next time I needed a mobile antenna, I would strongly consider one of the COMPACTenna models. We already had a 2m/70cm antenna on the family vehicle, so I didn't run right out and buy one of Dr. Jack's antennas. Boy, I wish I had.

As it turned out, the 2m/70cm antenna on our car had an argument with the garage door, and the garage door won. I hearkened back to Dr. Jack presentation and started looking at his website at <https://compactenna.com> to decide on an antenna. I went with the Model 2M/440. I don't pretend to understand the physics, but this short antenna works just as well as our previous antenna, which had only 1 inch clearance with the garage door fully opened. I am very pleased with the Model 2M/440 and I am glad I ignored the few naysayers I encountered during research. New ideas and new technology seem to always have its detractors. I overheard two hams talking on HF and the first ham was describing his antenna setup and the second ham proclaimed confidently that the antenna setup could never work. The first had replied, if that setup could never work, how am I talking to you on it right now?

The first time I saw the COMPACTenna 20/40 MICRO HF Antenna was on Sunday, March 10, 2024, at the NOARS Winter Hamfest. Dr. Jack had a table with his usual antennas, but he also had this new little black can with a white coax cable coming out near the bottom.

My wife Elaine, KC8FOS, enjoys outdoor HF operation; she prefers SSB. On these outings I help set up and tear down, but I don't operate, as I prefer FT8. I recently bought an FT8-specific transceiver kit from QRP Labs to

take on the outings with Elaine, but I could not decide what antenna to use. When I saw the COMPACTenna 20/40 MICRO HF Antenna, I thought that might be the one. I was talking to a good friend, Stephen Kinford, N8WB, about the new antenna. He said he just happened to have one he was testing, and he loaned it to me.

So, I had a chance to test out this light and small antenna that works on 40 meters and 20 meters. Those happen to be the two bands I was interested in using on these outings with Elaine. The antenna is light, weighing 2 lb. 4 oz. on our kitchen scale. It has two holes on the lip near the top, so we tied some UV resistant nylon cord to them to make a handle. We decided to hang it in a tree in the backyard so it would be at least 10 feet away from any metal and at least 10 feet above the ground.



On Easter Sunday we put up the antenna and I started to listen around the bands. The noise level seemed lower. I set my radio to transmit only 15 watts per the instructions for the COMPACTenna 20/40 MICRO HF. You can use

up to 100 watts on SSB, but for all other modes it is a maximum of 15 watts. I was a little skeptical because with my current antennas (Hustler 6BTV and a 40m EFHW) I needed at least 30 watts to talk to anyone on FT8 and a lot more power for DX. I started on 20 meters. My first contact was Teddy, WA4TED in McMinnville, TN, 444.6 miles away, which is good for 15 watts. I always thought it was my location and not my antenna that were holding me back from QRP. Maybe not. My next contact was Terry, KE0RB in Marion, IA, even farther away at 500.4 miles. My next contact was Jeffery, KC5TT in Katy, TX, which is 1115.3 miles away, on 15 watts with a 9½ inch diameter by 10-inch-high antenna up in a tree.



I decided to switch to 40m to see how the NVIS part of the antenna works. My first contact on 40m was James, WA4YWM in Quakertown, PA, 349.2 miles away. My next contact was Richard, KF9KV in New Glarus, WI, 406.5 miles away. After that it was Wayne, AC9HP in Indianapolis, IN, 256.9 miles away, good for NVIS. Now back to 20m. I contacted Roger, KO4O in Trinity, AL, at 546.9 miles. I thought I was doing pretty well for 15-watt DX, since these contacts beat my current antennas at that power level, and then this happened. My last contact was Luis, EA1A in Cantabria Spain, That's 3,821.3 miles away!

I usually say, “Life it too short for QRP.” I know 15 watts is not QRP, but it is very close, considering I need to run 100 to 500 watts on my vertical to get the same results I was getting from the COMPACtenna 20/40 MICRO HF. This little antenna looks very promising.



N8FDY Logbook										
List Incoming 7 Awards Leaderboard Help										
Enter Call...		Add QSO		QSOs: 1840 Confirmed: 1526 Countries: 128 Counts could be delayed - force refresh						
K	<	1	>	of 123	Search...	Filter:	All QSOs			
Date	Time	RX Call	TX B.	TX Freq.	RX Mode	RX Grid	RX Country	RX Operator Name	Comments	
1 2024-03-31	22:01	EA1A	(20m)	14.077	FT8	IN73wj	Spain	LUIS SEGURA	★	□
2 2024-03-31	21:58	KO4O	(20m)	14.075	FT8	EM64kn	United States	ROGER D COOK	★	□
3 2024-03-31	21:46	AC9HP	(40m)	7.075	FT8	EM69ts	United States	Wayne R Michael	★★	□
4 2024-03-31	21:42	KF9KV	(40m)	7.075	FT8	EN52et	United States	RICHARD S SAMUE...	★	□
5 2024-03-31	21:29	WA4YWM	(40m)	7.076	FT8	FN20hj	United States	James W Elmore	★	□
6 2024-03-31	21:15	KC5TT	(20m)	14.075	FT8	EL29cs	United States	Jeffery P MacMillian	★★	□
7 2024-03-31	20:08	KEØRBX	(20m)	14.076	FT8	EN42eb	United States	TERRY L WHALEY	★★	□
8 2024-03-31	19:53	WA4TED	(20m)	14.075	FT8	EM75dq	United States	Teddy D Boyd	★★	□