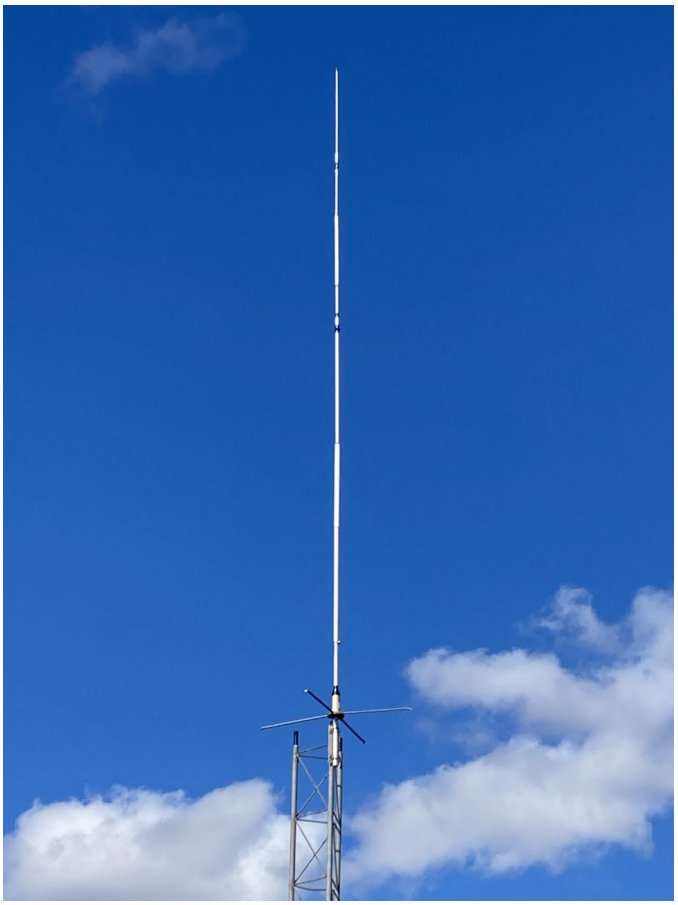
SQUELCH TALES

Newsletter from the Merrymeeting Amateur Radio Association for December 2025

Hustler Antenna Review

By John Best, WA1YIH

This is a review I put on eHam about the Hustler G7-144 antenna that I own and just put up recently.



The G7 is a very good antenna and will last a long time if you take certain precautions. Back in the 90's I was working at a 2 way radio shop and I installed over a dozen of these antennas, granted they were the G7-150 series but they were the exact same construction.

When I swapped out the customers old antennas for the new G7 their range increased tremendously, like miles difference. I've had a G6-144B in the past and it was a great antenna, very good range just 15 feet off the ground. I swapped it out with a G7-144 and had better range, quieter repeater signal strength and the simplex range increased. I had installed a G7-150-2 60' up on the tower at the Free port Public Safety building for our fire dispatch in 1993. I could hear our dispatcher 20 miles away on my Monitor II pager, and get back to dispatch 30 miles away on a mobile. Dispatch was running 180 watts out on VHF. That antenna lasted till 1998 when an ice storm here "froze" the antenna up for 2 days because it was coated in ice. That spring the antenna was replaced with an Antenna Specialist ASP-682 fiberglass antenna. There was no difference in performance between the 2 antennas, just a 5 times the price difference between the Hustler and A/S.

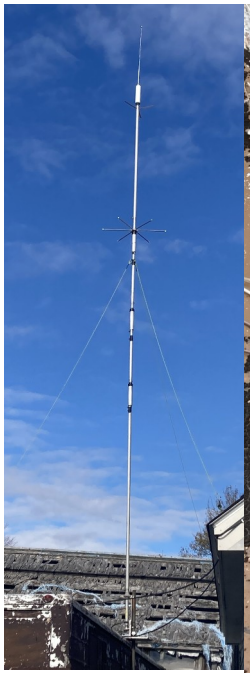
I kept the Hustler and several years later installed it at my place just 15 feet in the air.

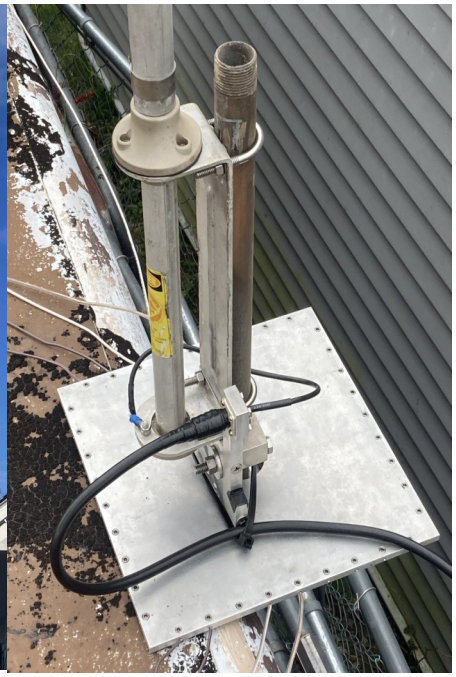
It stayed up for almost 10 years then I took it down and stored it away for 15 years. I just reassembled it and installed it on a 20' tower. Granted this is the G7-150-2 model that covers the 154-161 MHz range but with my VNA I got a flat match across the 2 meter band with no problems.

All I did was add 2 inches to the G7-144 chart measurements. So boys and girls, these antennas will work on 2-meters very well. Now when assembling the antenna you need to wrap plastic tape around 2 joints, at the top "Z" section where the 2 pieces slide together at the hose clamp and at the "Y" section where the 2 pieces slide together at the hose clamp.

One time I troubleshot a customers Hustler G7, not my installation, to his antenna being full of water. I dissembled it, dried it out and reassembled it taping those 2 joints. No further issue ever.

As of this review the G7-144 is currently in the $460 price range, it was $130 in 1993.





I Included a picture of my 5BTV vertical and homemade base plate my son made me.

73,

John, WA1YIH

QCWA MAINE PINE TREE CHAPTER INFO COLUMN

W2MM in 2025 Almost Here!

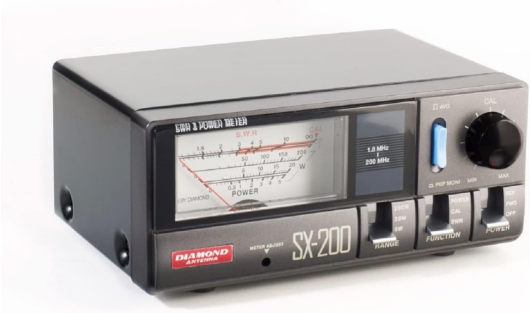
The Quarter Century Wireless Association is pleased to again put W2MM on the air. W2MM is the club callsign belonging to our organization. The period of operation will be 0000 UTC December 1 to 2359 UTC December 7. Modes of operation will include CW, SOB and the digital modes FT8/FT4. A certificate can be self-requested as we have done in the past. The certificate will be available after the contest has finished and will again be provided through the donated efforts of Lou Maggio, NO2C. This is a very welcome service he has provided to QC for several years now.

We will be on our standard event frequencies +/- 10 kHz depending on band conditions.
CW: 3.540 7.035 14.040 21.050 28.050
SOB: 3.810 7.244 14.262 21.365 28.325
FT8/FT4 should be used in standard mode (no F/H) on the standard FT8/FT4 frequencies.

We could use a few more operators. If you are a QC member in good standing and have a United States issued license, please contact us at activitiesmanager@qcwa.org.

This is always a fun event. We hope to see you on the air working, or maybe operating, as W2MM.

Submitted by: John Kludt, K7SYS, QC Activities Manager



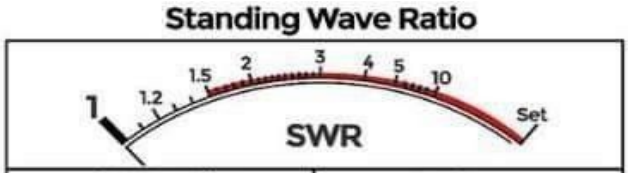
Don’t become OCD over SWR

By J. Bruce Randall, W1ZE

In my much younger days (circa 1960s) while becoming infected with all things Radio-Electronics and Amateur Radio, like most new hams in this great hobby, I was aware that a Standing Wave Ratio, affectionately referred to as “SWR” had an effected on RF power output, especially if the reflected power was high. When I noted that I had an SWR of 1.5:1 I started to wonder how it was affecting my output power. If it was higher than that I spent more time looking at my reflected power than enjoying communicating with other like minded radio nerds.

The longer I spent in the hobby and in the real world of radio communications I became better informed on what SWR did and how it really effect communications performance. I learned that standing waves was more about matching an antenna load to the transmitter rather than the overall performance of the antenna. That is why antenna tuners (*or a better name is “trans match” because they do not tune an antenna, they are only an impedance matching device*) are used to let the transmitters 50-ohm output see a load impedance something closer to 50-ohms. Many antennas such as doublets, end fed wire antennas, etc. do not have an input impedance near 50-ohm.

You may ask, “how much power to the antenna is lost as the SWR ratio increases?” The following is a matrix chart showing the percentage of power loss with increasing SIR:



SWR Reading	% Of Loss
1.0:1	0.0%
1.1:1	0.2%
1.2:1	0.8%
1.3:1	1.7%
1.4:1	2.8%
1.5:1	4.0%
1.6:1	5.3%
1.7:1	6.7%
1.8:1	8.2%
1.9:1	9.6%
2.0:1	11.1%
2.1:1	12.6%
2.2:1	14.1%
2.3:1	15.5%
2.4:1	17.0%
2.5:1	18.4%
2.6:1	19.8%
2.7:1	21.1%
2.8:1	22.4%
2.9:1	23.7%
3.0:1	25.0%
4.0:1	36.0%
5.0:1	44.4%
6.0:1	51.0%
7.0:1	56.3%
8.0:1	60.5%
9.0:1	64.0%
10.0:1	66.9%

Using this matrix you can see what the loss percentage indicate. A 1.0:1 SIR is ZERO loss while a 2:1 SIR is +/- 11%. Truth is if your transmitter is putting out 100-watts and your SIR is 2:1 you have a loss of 11-watts. Not all that much is it?

With most modern transceivers they have SWR protection built in and when your SWR climbs above a preset level the transceiver cuts down the power so as to not overheat the final amplifier. Many of these transceivers have built in antenna tuners (trans match) that will tune out SW’s less than 3:1.

So don’t get worried about what you think SWR is doing to your signal just get the reading down to below 2:1 to keep your thousand dollar rice box running cool.

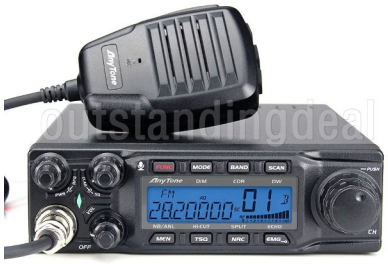
Happy Holidays & 73,

Bruce/ **W1ZE**

SWAP-N-TRADE

Squelch Tales newsletter, will be happy to post readers ham radio related equipment items for sale or trade. Send your item with description to Bruce Randall/W1ZE (jbrandall43@comcast.net).

ANYTONE AT-6666 10-Meter all-mode transceiver



60-watts in SSB. & yes it will operate on 11-meters. It is in like new condition with box, manual, programming cable & hardware. $125.00 + shipping if you want it mailed to you. POC = Bruce, W1ZE in Phippsburg at jbrandall43@comcast.net

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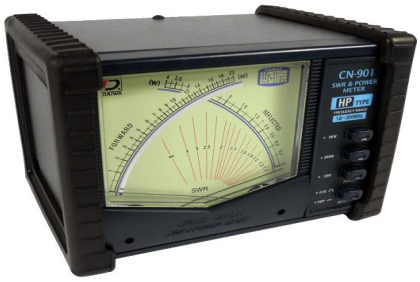
DAIWA CN-901HP SWR & POWER METER



Professional Series Bench Meters SWR/Wattmeter, 1.8-200 MHz, 2,000 W Max., Cross Needle, UHF Female, SO-239, 13.8 Vdc, Each. Sells new for over $200. Asking $120 POC: Bruce/W1ZE at jbrandall43@comcast.net

The MARA Officers and newsletter editor want to wish all Squelch Tales readers all the happiness and joy through this Holiday Season.

We hope that that chummy fellow is a red suit leaves a load of ham radio goodies under your tree and stuffed into your hung stocking.