



The Radio Hotel - The Antenna - Part 9 by W5RH

The Antenna -- c'est tout! References for Learning More

The Radio Hotel – The Antenna series has to end sometime and that time is now. (Thank goodness, say most of you -- HI) To be fair to those few that would like it to continue, I am going to give you a big shove. Not physically, but knowledge-wise. Throughout this series I have tried to engage that inner technical Ham in you so that you will read and investigate and build and use and measure. In this last TRH--The Antenna submission, I want to provide you with some books, some articles and some online references that you can chase down to learn more.

Fundamentally, what you really want to do is understand how our antenna “systems” work -- what influences their performance, the interactions of the individual parts, why certain antennas are better at DX or at multi-banding, etc. Before I get into the references I want to leave you these two thoughts:

1-- Antennas should always be looked at as a “system” consisting of the RF source, transmission line, matching networks (if any) and the load – the antenna itself.

2--A firm grasp of the fundamental principles and characteristics of antennas and transmission lines is absolutely essential for it to all make sense.

Reading references: Antenna Books

ARRL Antenna Handbook – 1939 (Vol 1) thru 2015 (Vol 23) preferably a later edition

Low Band DX'ing – ON4UN Current edition is #5, but Publication # 4 is on-line free. Excellent.

Verticals – Paul Lee – N6PL

Antennas – Bill Orr (any Bill Orr Book – Beams, Quads, etc.)

Reading references: Recent Articles --

QST -- November 2015 – “Antenna Gain”

QST – Any month – “The Dr. is In” column – Joel Hallas, W1ZR (also, any article by Joel Hallas)

QST – March 2015—The Antenna Issue – the whole issue is filled with antenna system goodies.

QST – Any month “Hands On Radio” column –Ward Silver – N0AX -- occasional antenna topics

Reading references: On-Line

www.BVARC.org – Tech Articles Page – Antenna articles by knowledgeable club members

www.ac6v.com – Antenna Projects

www.arrl.org – QST Archives 1915 to the present – search on any subject

K1TTT.net – Tech Reference page

W8JI.com – Antennas – Highly technical, but filled with good, solid information

So, with that, I wish you well. Antenna systems are quite interesting and can keep your experimenting urge very busy for many years. Tune in and turn on to antennas. They are your pathway to on-air Ham Radio enjoyment. Yes, I write these articles, but I certainly don't claim to know it all. I simply have a keen interest in the subject. So if you have a question or need a publication referral to answer a query on your part, I'd be pleased to help you. My contact info is in the BVARC roster. Don't hesitate to use it. Enjoy your hobby. 73.....Rick – W5RH

Next time.... Analyzing with Antenna Analyzers

The purpose of **The Radio Hotel** is to give you a practical kickstart into exploring the workings of antenna systems. It is a series, so go back and read the previous columns to get the whole picture, as one month relies on the previous month's information. Google the buzz words and find out what they mean. Read up on antenna system theory to see how it all works together. You will be glad you did.

