

NFARL Antenna Special Interest Group (SIG)

Self-Study Reading Assignments

Month 5– SWR, Matching and Tuners

- **Week 1** – for net discussion on 05/06/2010
Standing Wave Ratio (SWR or VSWR)
 - *Reflections*, Walt Maxwell, Chapter 1: “Too Low an SWR Can Kill You”,
<http://w2du.com/Chapter01.pdf>
 - “Standing waves, Power Loss, Line Voltage /Current” ARRL Antenna Book, pp. 24-8 thru 24-11
 - “VSWR or Voltage Standing Wave Ratio”, (another look at the subject with a practical ending)
<http://emc.toprudder.com/vswr.pdf>
- **Week 2** – no net discussion on 05/13/2010
Dayton Hamvention
- **Week 3** – for net discussion on 05/20/2010
Matching: antenna, feedline, tuner and amplifier
 - “Coupling the transmitter to the line” thru “harmonics and stubs” ARRL Antenna Book, pp. 25-1 thru 25-3
 - “How to use your antenna tuner” <http://www.hamuniverse.com/tuner.html>
 - “Transmission Line for Windows – TLW” ARRL Antenna Book, CDROM
 - “Transmission Line Details” <http://www.ac6la.com/tldetails.html>
 - EZNEC Experiments with transmission lines and transformers
- **Week 4** – for net discussion on 05/27/2010
Tuners: T, L, Pi, manual and automatic
 - “Inductive Coupling” ARRL Antenna Book, pp. 25-3 thru 25-6
 - “The L, Pi, and T Networks” ARRL Antenna Book, pp. 25-6 thru 25-9
 - “A T-Network Tuner Simulator” <http://fermi.la.asu.edu/w9cf/tuner/tuner.html>
 - Some Practical Implementations ARRL Antenna Book, pp. 25-13 thru 25-19
 - Automatic Tuners Personal Web Research
- **Face-to-Face Meeting** – Saturday, May 29, 9:00 a.m. to Noon