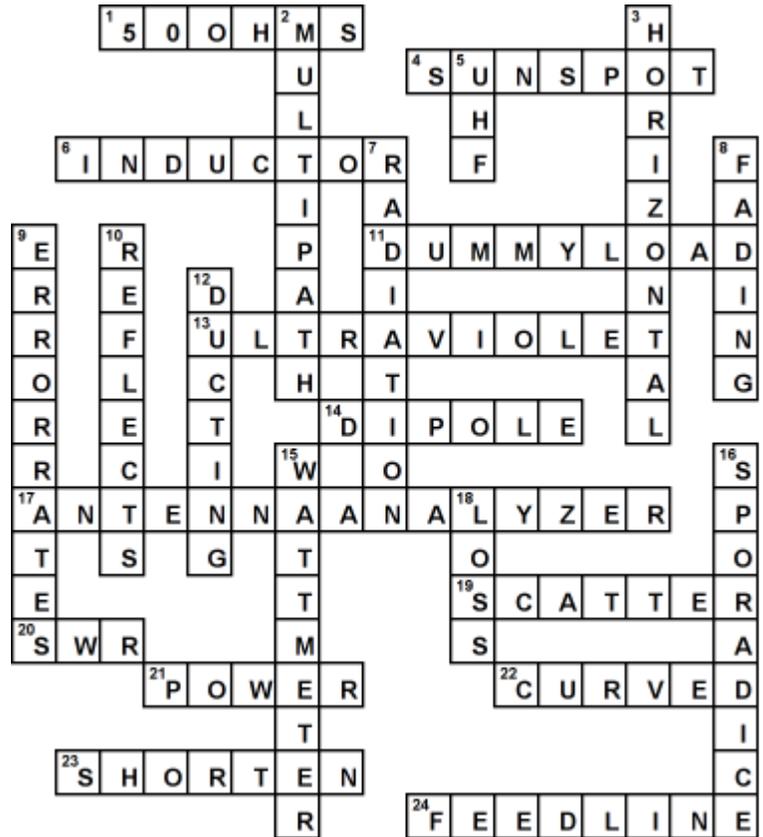


# Lesson 5B ver 2

6Feb2015

## Across

1. The impedance of the most commonly used coaxial cables (2,4)
4. Six or ten meters may provide long distance communications during the peak of the \_\_\_\_\_ cycle
6. An \_\_\_\_\_ in the radiating portion of the antenna to make it electrically longer is a type of antenna loading
11. A \_\_\_\_\_ prevents radiation of signals when making tests (5,4)
13. \_\_\_\_\_ light can damage the jacket and allow water to enter coaxial cable
14. A \_\_\_\_\_ antenna with the conductor parallel to the Earth's surface is horizontally polarized
17. An \_\_\_\_\_ can be used to determine the resonant frequency of an antenna is (7,8)
19. Tropospheric \_\_\_\_\_ is responsible for over-the-horizon VHF and UHF communications to ranges of 300 miles on a regular basis
20. \_\_\_\_\_ is a measure of how well a load is matched to a transmission line
21. \_\_\_\_\_ lost in a feedline is converted into heat
22. Radio signals travel farther than the line of sight distance because the Earth seems less \_\_\_\_\_ to radio waves than to light
23. To make a dipole antenna resonant on a higher frequency \_\_\_\_\_ it
24. Coax connectors exposed to the weather be sealed against water intrusion o prevent an increase in \_\_\_\_\_ loss



## Down

2. Signal reflections may cause \_\_\_\_\_-\_\_\_\_\_ distortion (5-4)
3. \_\_\_\_\_ antenna polarization is normally used for long-distance weak-signal CW and SSB contacts using the VHF and UHF bands
5. \_\_\_\_\_ signals rarely heard from stations outside your local coverage area because they are usually not reflected by the ionosphere
7. A VHF or UHF mobile antenna mounted in the center of the vehicle roof provides the most uniform \_\_\_\_\_ pattern?
8. Combining of signals arriving via different path lengths is a cause of \_\_\_\_\_ of signals from distant stations
9. \_\_\_\_\_ are likely to increase if VHF or UHF data signals propagate over multiple paths (5,5)
10. Try to find a path that \_\_\_\_\_ signals to a distant repeater if buildings or obstructions are blocking the direct path
12. Temperature inversions in the atmosphere causes tropospheric \_\_\_\_\_
15. A directional \_\_\_\_\_ could replace a SWR meter to measure feedline and antenna matching
16. When VHF signals are being received from long distances, they are being refracted from a \_\_\_\_\_ layer (8,1)
18. As the frequency of a signal passing through coaxial cable is increased the \_\_\_\_\_ increases