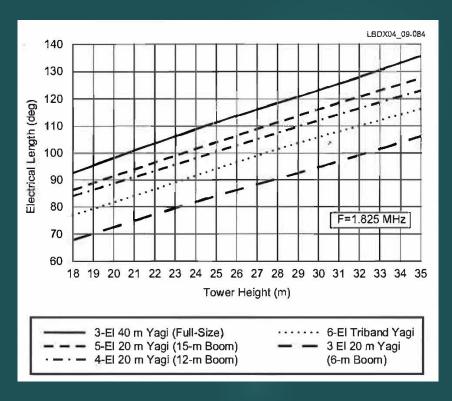
Shunt Feed Your Tower!

JOEL HARRISON, W5ZN



What is the resonant Frequency of my tower?

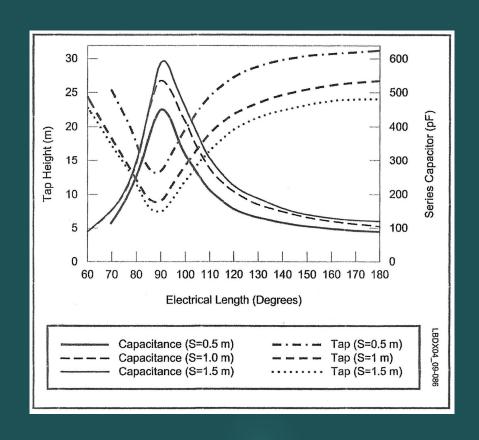
It won't be 50 Ohms!!





The Shunt Wire

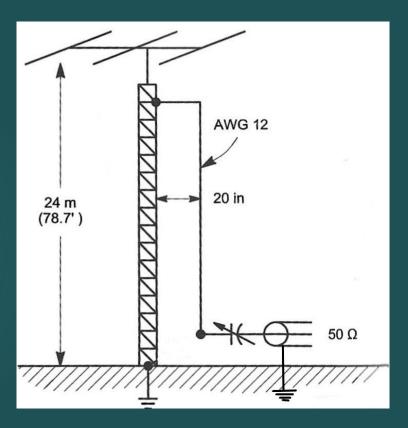
- Where should I connect the shunt wire
- How far from the tower should the shunt wire be?





Feed the Tower!





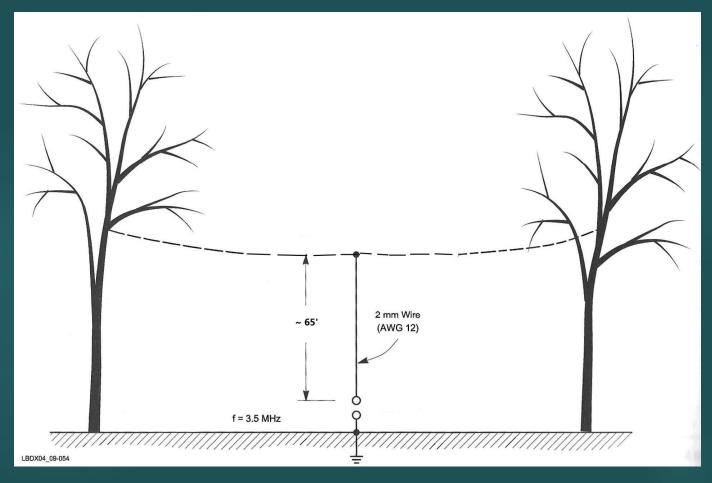


Radials

- ► How many radials do I need?
 - ▶ 16 will be amazing but 8 will work
- Do I have to bury them
 - ▶ No but if you do don't bury them too deep
 - ▶ Don't lay them under fresh water!!!!
- I can't leave radials in yard year round
 - ▶Or "my wife want let me"

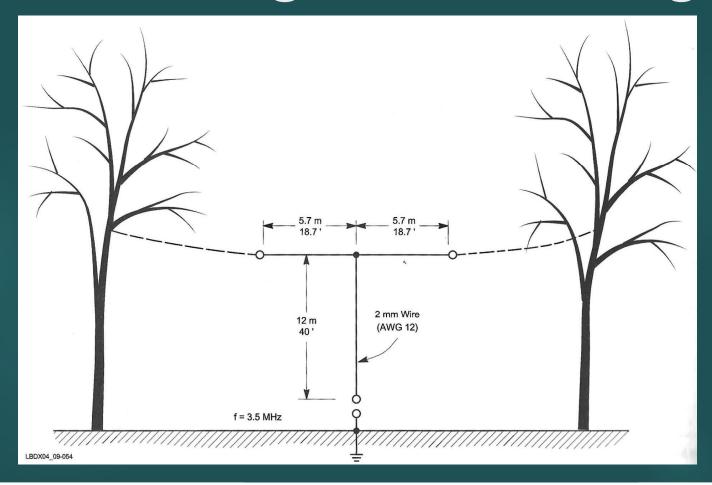


But I don't have a tower!





I can't hang a wire 65' high





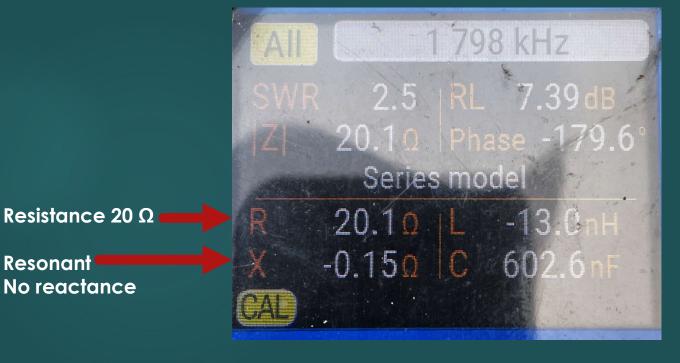
Tuning for resonance

- ▶ Use an antenna analyzer
 - ▶ Don't look at SWR
 - ▶ Select "All Parameters



Tuning for resonance

▶ Adjust antenna length for zero reactance



Bonus Slide

► Test Equipment – the two most valuable instruments beyond a VOM



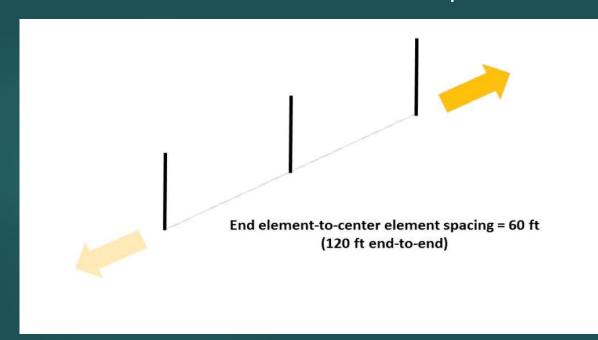


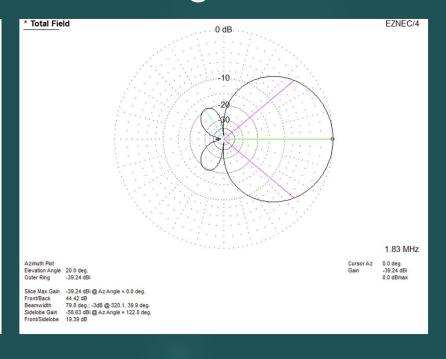
Receive Antennas

- ▶ If you're going to put up a nice TX antenna, you'll want to improve you RX
- ► Most popular Beverage 580 ft (one direction)
- **▶** Options:
 - ► HiZ-8 100 ft diameter (8 directions @ 45°)
 - ▶BSEF-8 180 ft diameter (8 directions @ 45°)
 - ▶YCCC-9 120 ft diameter (8 directions @ 45°)

Best option for single direction

Performance equal to 580 ft Beverage!







GET IN THERE AND WORK 'EM!!