BEING HIGH IS BETTER

[re: Antenna Supports]

According to K6RFT Summer of 2000

How to be Higher

Tower

Trees

Utility Poles

Why Not a Pole?

One pole is **good**, ... but

Two poles would be better

One pole stacked on top of another is best?

Splicing Options

Scabbing each pole and bolting them together

Insert poles into a pipe sleeve

Butt the poles and use two channel iron sections to sandwich them

On Hand Materials

- 30 & 35' utility poles
- 1/4" guy wire

Pole line hardware

8" Iron pipe

What Tools are on Hand?

- Utility Line Truck w/ 30' boom, auger, and winch
- Peavy
- Tape measure
- Plum Bob
- Concrete mixer
- Big Hammer

Let Some Guys Help

- Often 3 guys are used, (120 degrees)... but
- Four guys fit better, (90 degrees)

Four guys at the splice AND
At the top?







How to Attach the Guys

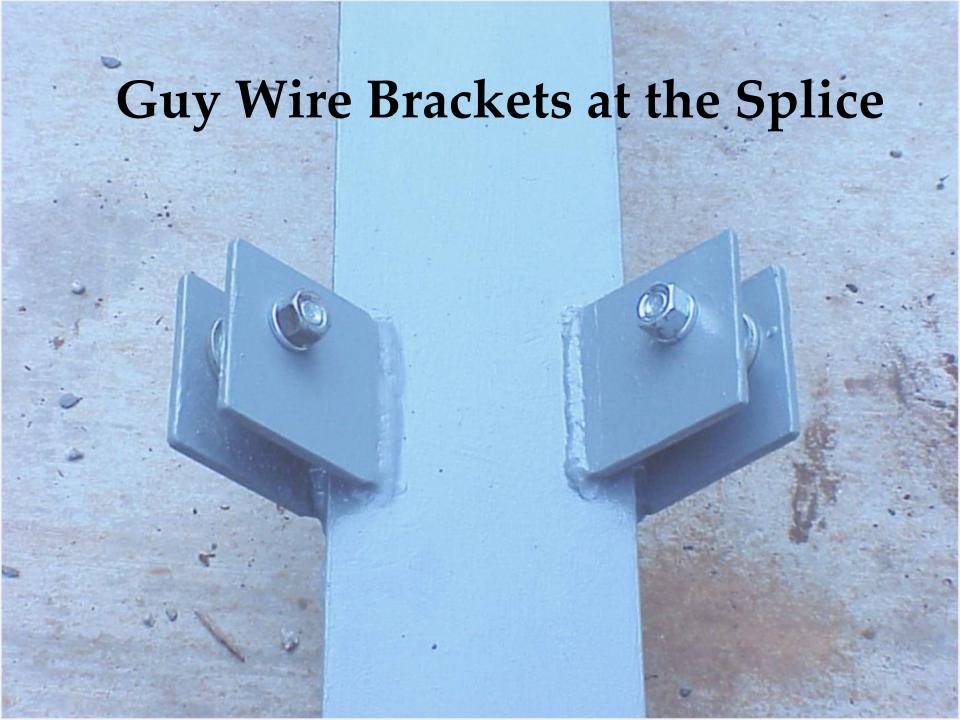
- At the Top:
- Weld brackets to a 8" pipe section
- Slip the pipe section over the pole

- At the Splice:
- Weld brackets to the channel

Guy Attachment at the Top of 3/8" bolt holes the Pole

4ea guy wire brackets

8" sch 40 pipe



The Splice

Poles are tapered and crooked:
Difficult to align channel and drill holes

- □ Two 6" channel irons 10 ' in length
- Channel bolted with eight ³/₄" galvanized bolts



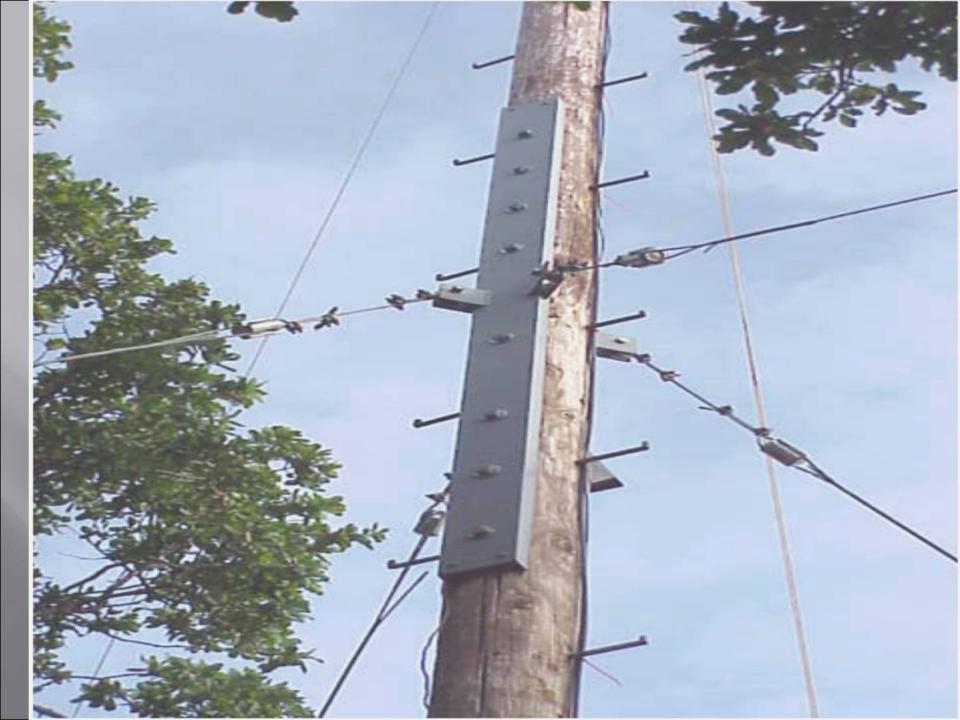






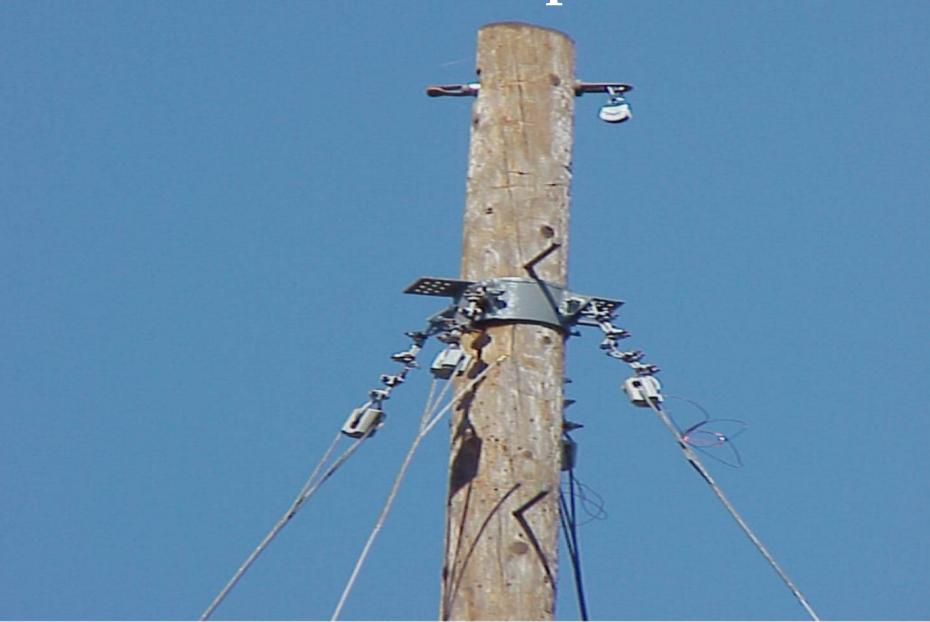








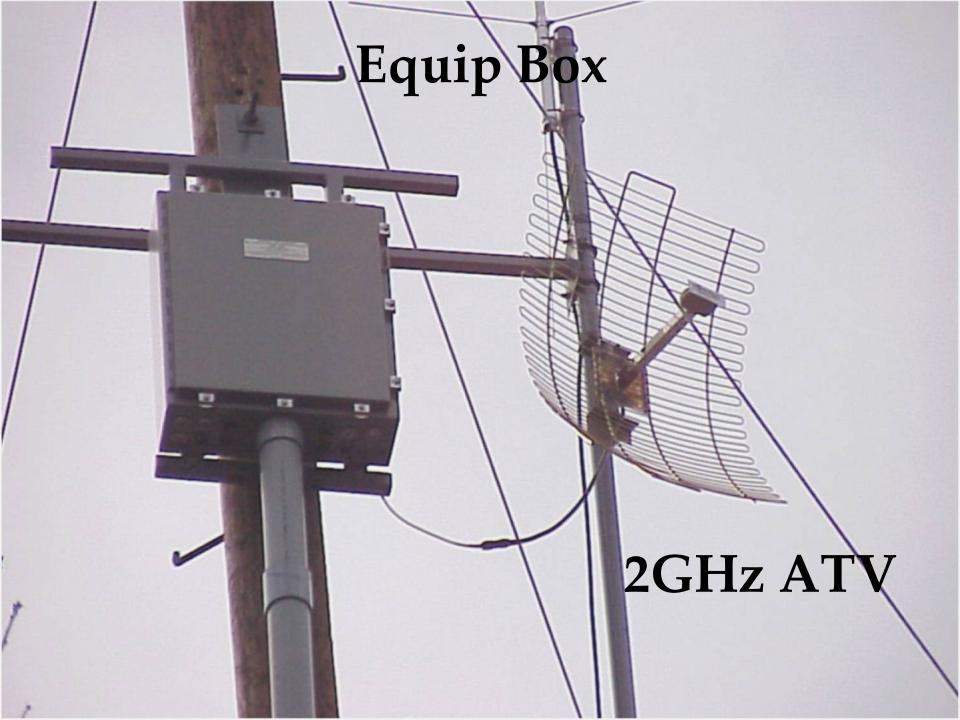
North Pole Top Detail

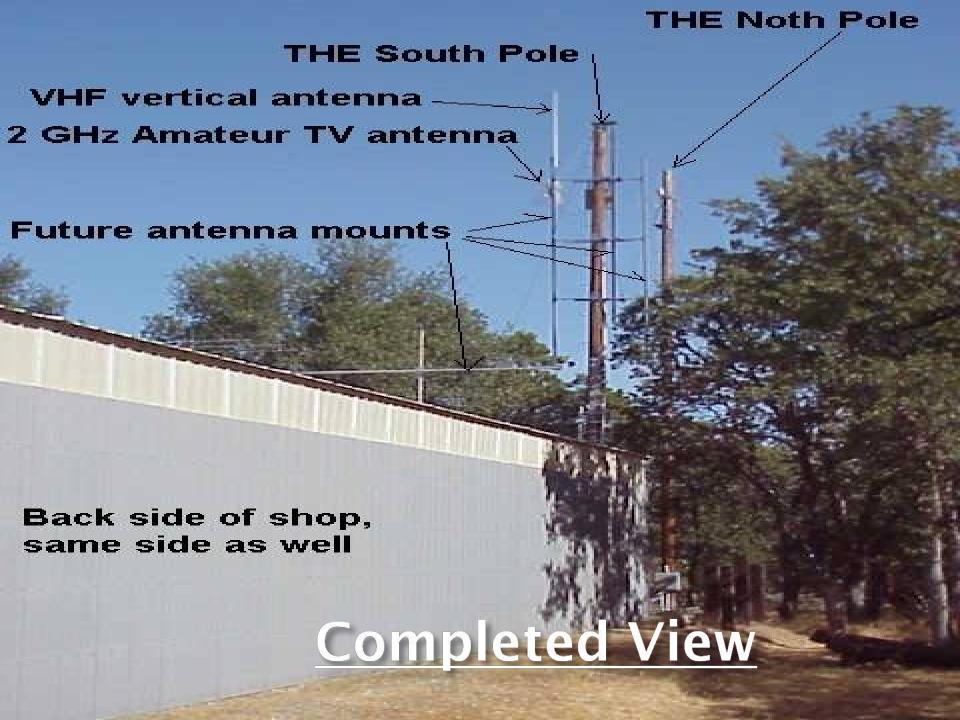


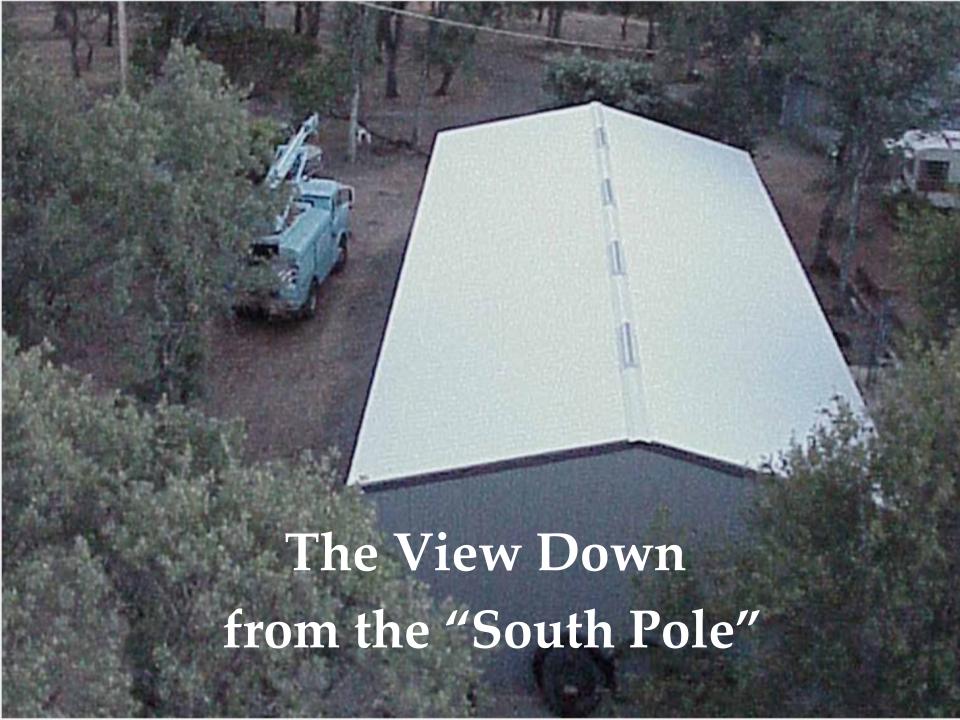
Guy Anchors

- Rods were 6'
- Set in concrete 4' x 4' x 1'
- Concrete was 5' below ground
- Two guys were raised above the ground level using 8" pipe filled and set in concrete









Pole Disadvantages

Climbing with 90 degree guys

Need for pole steps

Work platform need

Challenge to mount masts

Pole Disadvantages Cont'd

Equipment to set poles

Poles are crooked

Poles are tapered

Grounding

The End

