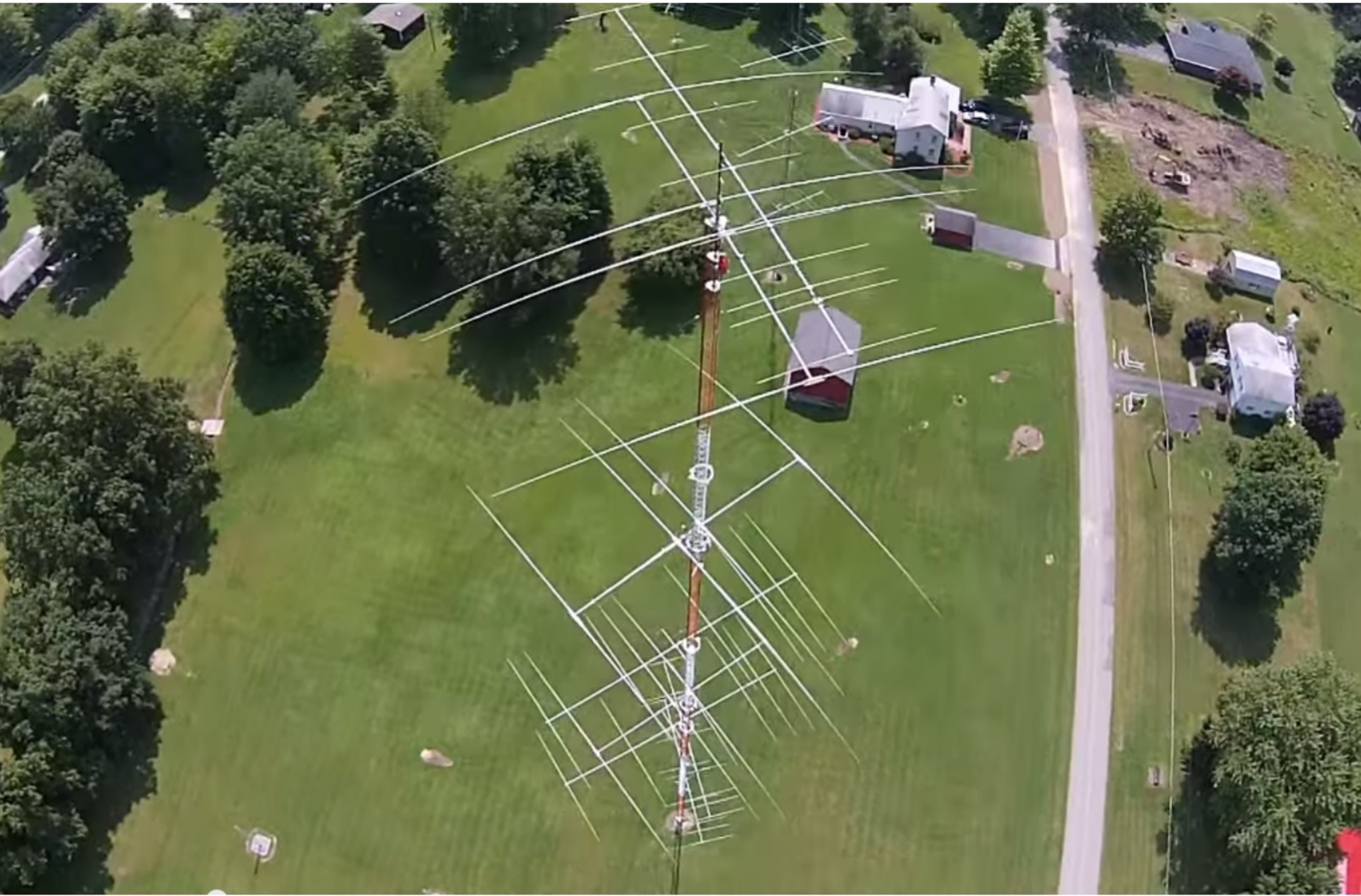


# Towers and Antennas

Tim Jellison W3YQ/KL7WV

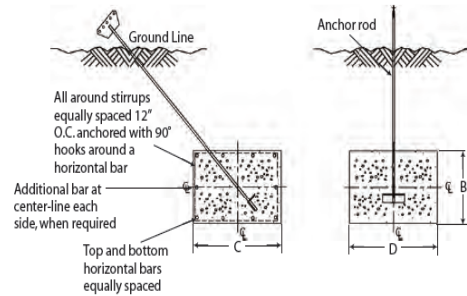


- Know what you're getting into when planning a tower
- Be safe when working on antennas and towers



- Do it right - or don't do it
- Follow the manufacturers' design rules
- Get advice from others
- Be professional (not a cheap ham)

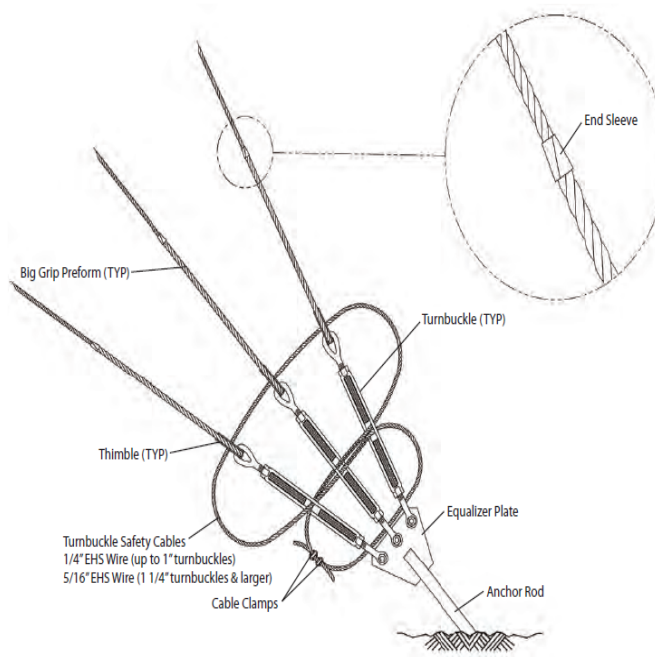
## STANDARD ANCHOR BLOCKS



Refer to page 68 for anchor rod installation angles.

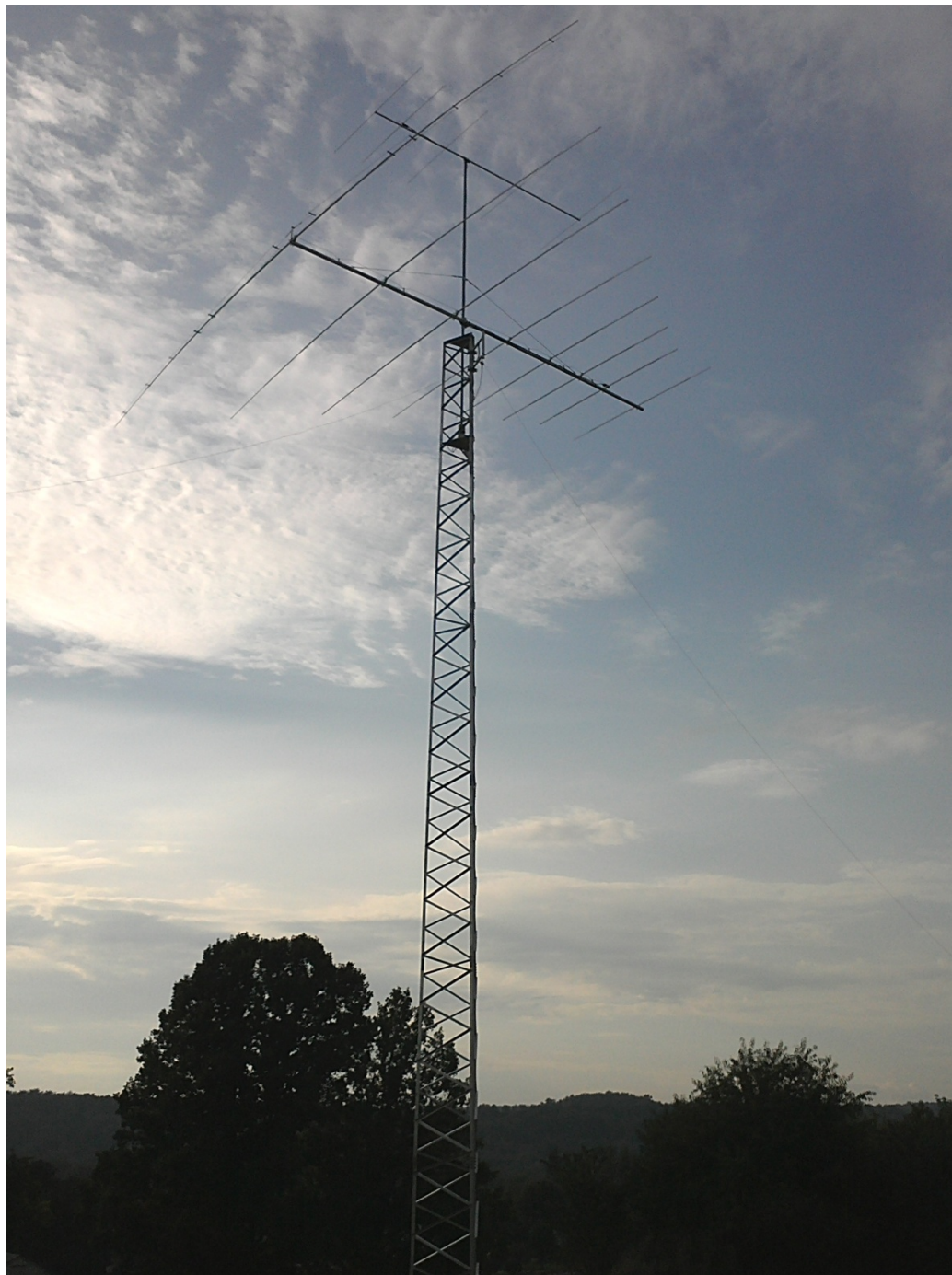
Block	Anchor Dimensions (in.)				Horizontal Bars (Qty. & Size)	Stirrup Size & Spacing	Concrete Vol. (Cu. Yds.)
	A	B	C	D			
AB2	4' - 0"	1' - 6"	4' - 0"	6' - 0"	(5) #6 Bars, Top Layer (5) #6 Bars, Bottom Layer (0) Additional Bar, Each Side	#3 @ 12" O.C.	1.33 Per Block 4.0 Total for 3
AB3	6' - 0"	1' - 6"	3' - 0"	6' - 0"	(4) #6 Bars, Top Layer (4) #6 Bars, Bottom Layer (0) Additional Bar, Each Side	#3 @ 12" O.C.	1.0 Per Block 3.0 Total for 3
AB4	6' - 0"	1' - 6"	4' - 0"	9' - 0"	(5) #6 Bars, Top Layer (5) #6 Bars, Bottom Layer (0) Additional Bar, Each Side	#4 @ 12" O.C.	2.0 Per Block 6.0 Total for 3
AB5	8' - 0"	2' - 0"	3' - 0"	10' - 0"	(4) #7 Bars, Top Layer (4) #7 Bars, Bottom Layer (1) Additional Bar, Each Side	#4 @ 12" O.C.	2.22 Per Block 6.7 Total for 3
AB6	8' - 0"	2' - 0"	4' - 0"	10' - 0"	(5) #7 Bars, Top Layer (5) #7 Bars, Bottom Layer (1) Additional Bar, Each Side	#4 @ 12" O.C.	2.96 Per Block 8.9 Total for 3

## GUY ANCHOR CONNECTION DETAILS



Anchor Connection





<b>Item</b>	<b>Amount</b>
Tower - AN HD60	\$4,450
Tower - Rohn TB3 Thrust Bearing	\$160
Tower - Mast	\$832
Tower - Shipping	\$250
Tower - Concrete Work	\$4,500
Tower - Crane	\$420
Tower - Labor	\$3,830
Rotator - M2 Orion 2800	\$1,803
6M Yagi - M2 6M5XHP	\$350
HF Antenna - M2 7-1030LP8	\$2,200
Coax - BuryFlex Wireman #103A	\$632
Rotor Cable - Wireman #306	\$376
Entrance Panels, Strap, Clamps, Arrestors	\$850
Machining of rotor plates	\$50
Installation of Entrance Panels/Grounding	\$900
<b>* Total *</b>	<b>\$21,603</b>



# NO SK's



# Some of the risks

- Falling
- Electrocution
- Medical issues while climbing
- Structural failure (including crank-up and tilt-over towers)

- Use the proper equipment
- Watch for power lines!
- What about the ground crew?
- Take a safety training course



Tower Climbing Safety & Rescue Training

***TIMOTHY J. JELLISON***

*Has Successfully Completed  
ComTrain's Requirements for  
Basic Certification as an*

***AUTHORIZED  
CLIMBER/RESCUER***

at

***TACOMA, WA  
4/11/2012***

*WJ Windham*

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# Finally a nice day!

