

Installation of a New Tower, Rotator and Beam

Chuck Curran W9POU
Fall, 2011



The following towers were considered:

Heights Aluminum Tower

Glen Martin Towers

Tashjian Towers

US Towers

Rohn Towers (Had one in 1967!)



I wanted an affordable crank-up tower for ease of maintenance, so that narrowed it down to just two companies with the options I required:

- Tashjian Towers
- US Towers

I chose the US Tower TX 455

Arrival of Adam from Fredonia for the tower base



Digging the opening for the concrete forms



Yup, it “WAS” a nice lawn-----



Getting a flat area for rebar & concrete forms.



Inserting the REBAR assembly, designed by US Towers



Initial layout for tower base



Leveling and Adjusting



Creating Ruts in the Lawn---



The Final Approach



Fill 'er UP, to 14,896 pounds please!



Final Smoothing



Hurry up and Dry! --One Month Cure Required

Note the significant Bracing



The concrete is cured, so raising fixture and tower are positioned.



Ready to Raise



Winch Assembly on Raising Fixture

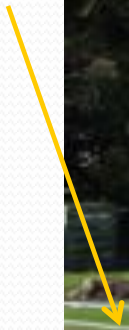


Pulley for Raising Fixture



Going Up

Beam



About ready to insert the final bolt



US Towers Model TX455, 55 foot Tower



Tower Ground System, three 8 foot rods



Complete the Tower Ground, using anitoxidant on connections



Harger Antioxidant

HCAJC8

Antioxidant Joint Compound

Copper Based

For Copper to Copper Terminations
For use as anti-seizing thread lubricant
Prevents oxide buildup

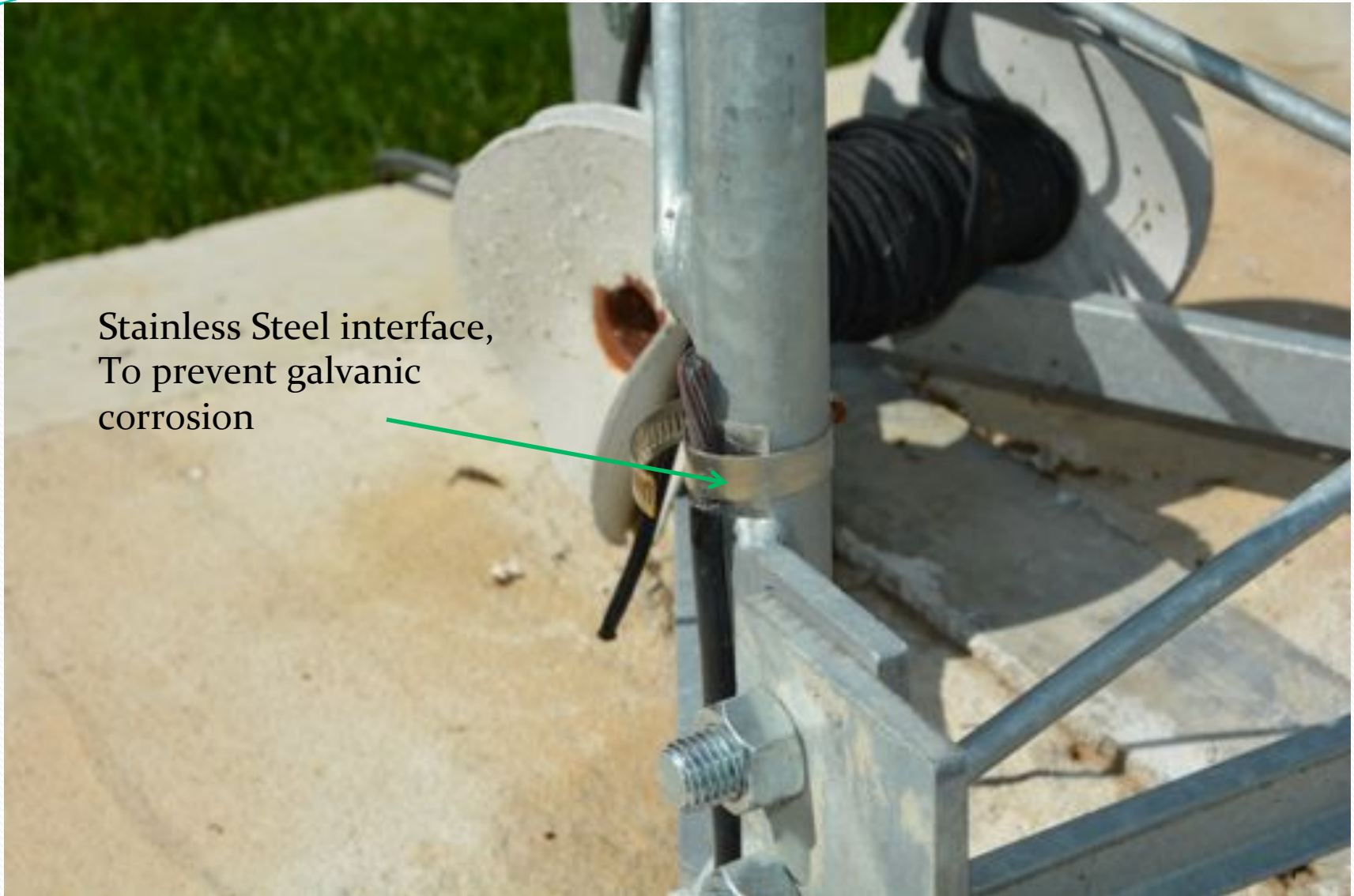
Harger Lightning & Grounding
301 Ziegler Drive
Grayslake, IL 60030
www.harger.com

8 fl. oz.

Tastes just like Peanut Butter, try it on Ritz Crackers!!



Tower Ground System



Stainless Steel interface,
To prevent galvanic
corrosion

Tower Ground System



Boom Truck Arrives



Initial Positioning



Final Alignment



Mosley TA-34XL 4 Element Beam and Yaesu G-1000DXA Rotator



Beam Close-up



Tower Close-up



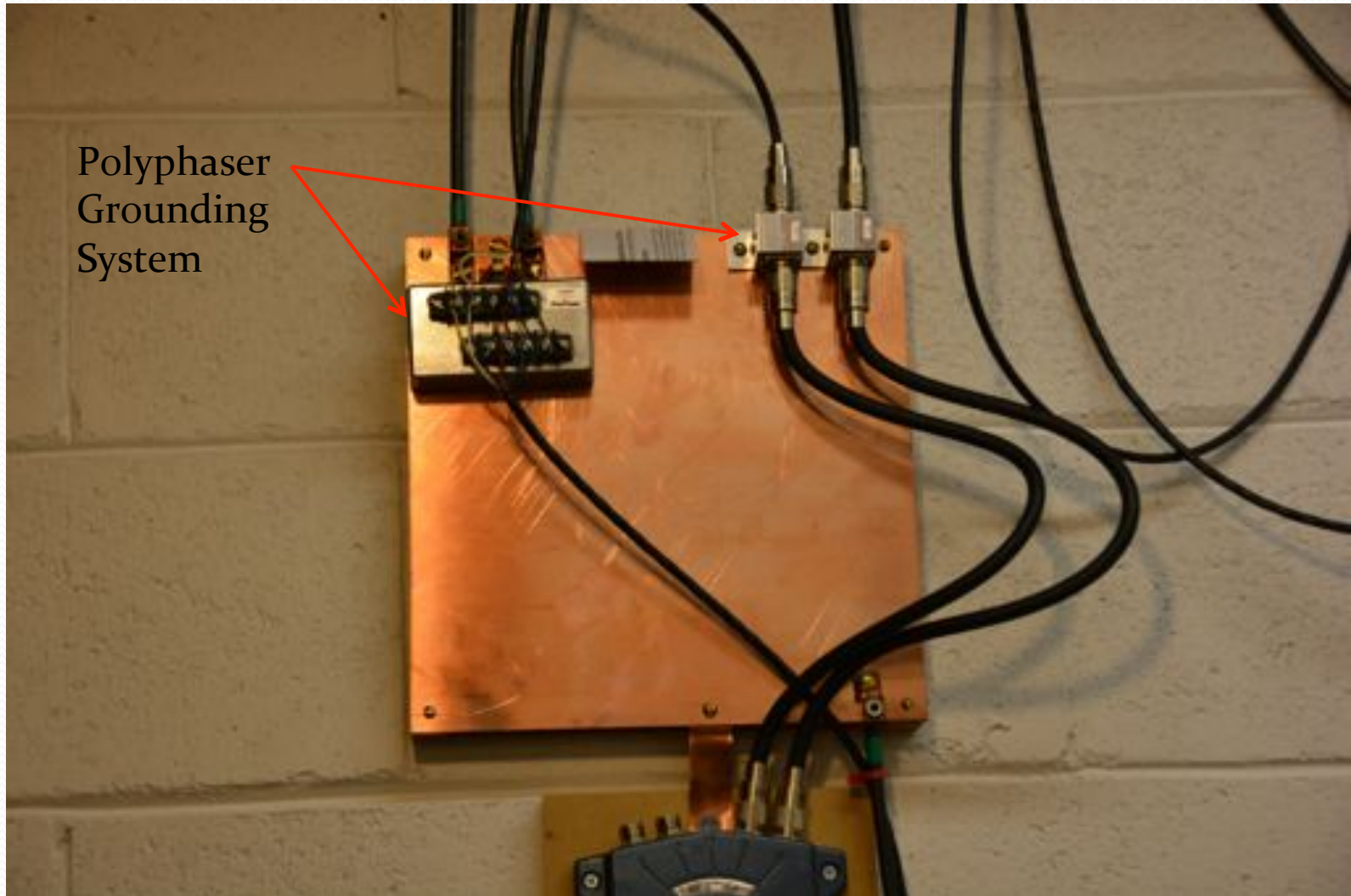
House Entrance



Antenna Termination inside



Station Ground Plate



Station Ground



Home Electrical System Ground Connection



W9POU Station





What did it cost?

US Tower Cost

- US Tower TX-455 \$2499.99
- CX-3 Coax Stand Off Arms \$119.99
- M-10 Mast \$119.99
- TRX-80 Raising Fixture \$679.99
- TB-2US Tower Base \$169.99
- Total US Tower Bill \$3589.95
- **But there's a few more items-----**

A few More Bills

• US Tower Total	\$3589.95	
• Shipping Charges	\$1415.05	
• Concrete Foundation	\$1500.00	
• Mosley Beam (with shipping)	\$1046.12	
• Yaesu G-1000DXA Rotator	\$599.00	
• Polyphaser Lightning Protection	\$218.00	
• Inverted V Arm and Texas Towers Shipping		\$150.40
• LMR 400 Coax & Rotator cable, 150' each	\$222.00	
• Ground Rods, 4 @ \$9.99	\$39.96	
• Boom Truck Fee	\$160.00	
• Town of Grafton Building Permit	\$90.50	
• Total	\$8870.98	

Pricing as of November, 2011



The End

(The tower still is up!)