
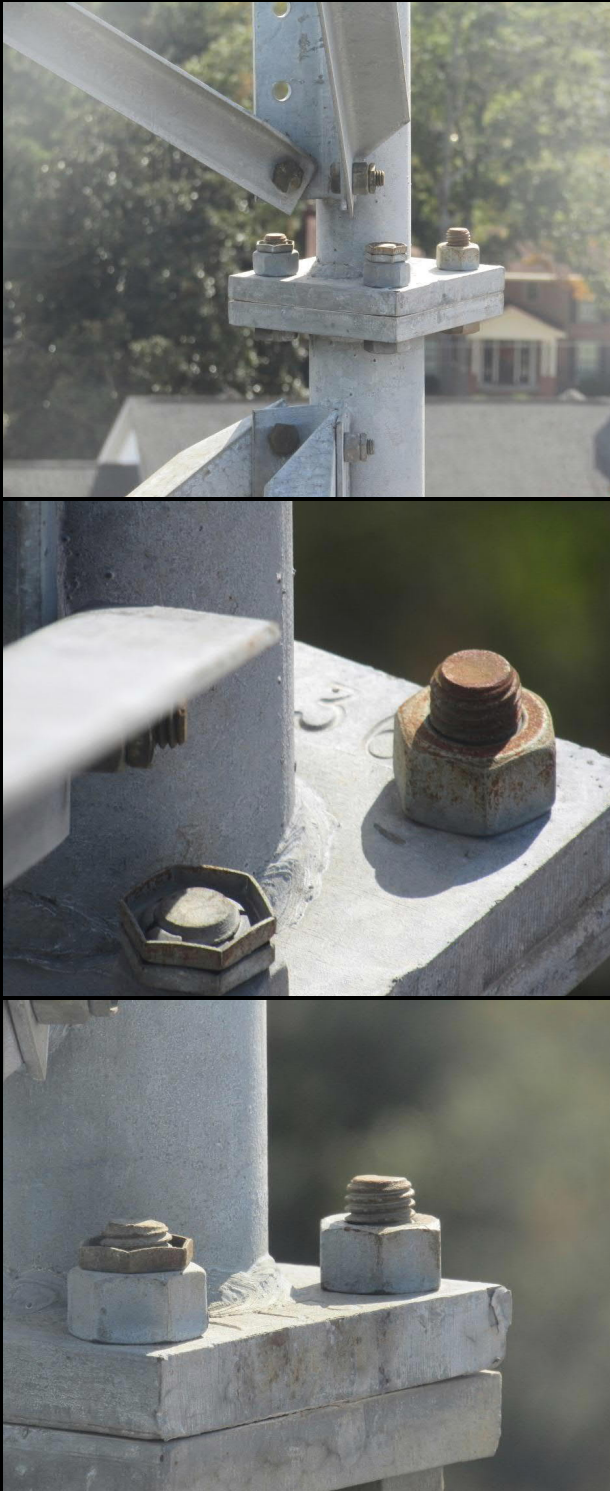


EXECUTIVE SUMMARY

Photographs	Observations and Recommendations
	<p><u>A.1. Damaged members (legs and bracing)</u></p> <p>Observation: Bent bracing members were observed at the following locations:</p> <ul style="list-style-type: none">• 3-ft – BC face (L2.5"x2.5"x0.1875")• 23-ft – BC face (L2"x2"x0.125")• 23-ft – CA face (L2"x2"x0.125")• 50-ft – BC face (L2"x2"x0.125") <p>Recommendation: A structural engineer licensed in the state of GA should review to determine if a repair is required.</p>

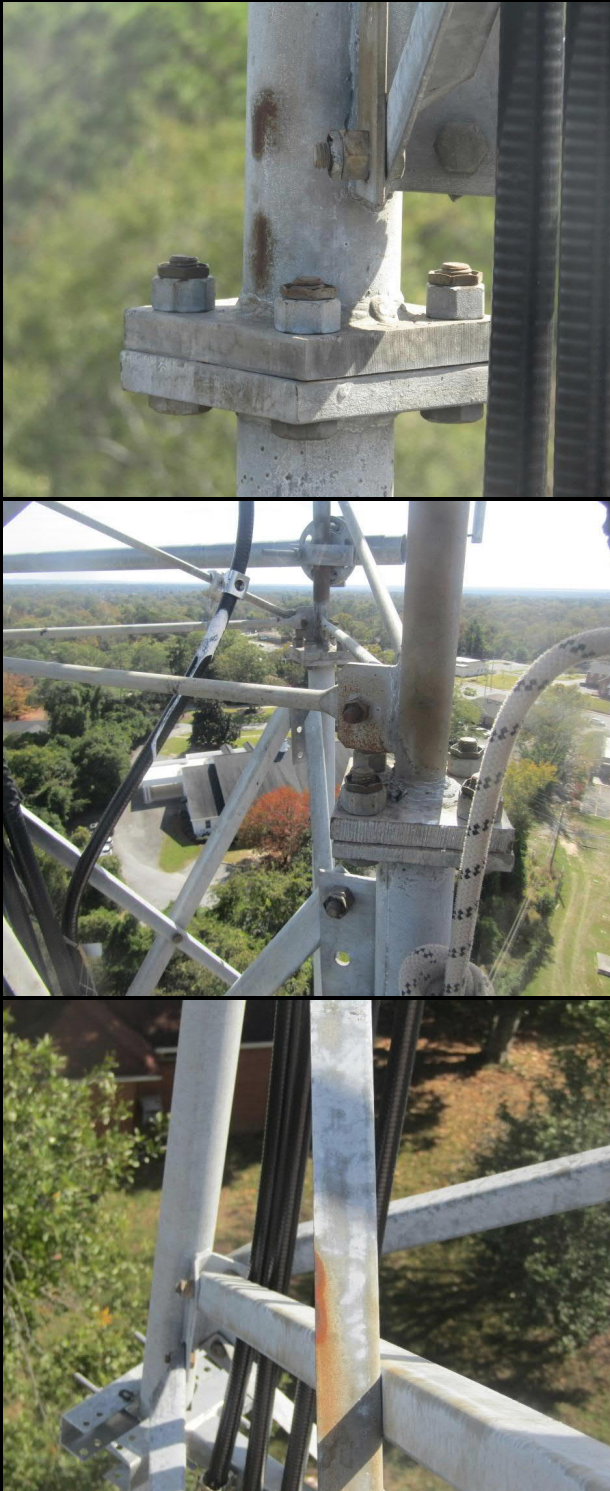


EXECUTIVE SUMMARY

Photographs	Observations and Recommendations
 The first photograph shows a close-up of a tower joint with several bolts. The second photograph shows a close-up of a bolt and nut on a flange, with a nut locking device missing. The third photograph shows a close-up of two bolts on a flange, with one nut locking device missing.	<p><u>A.4. Loose and/or missing bolts and/or nut locking devices</u></p> <p>Observation: Missing nut locking devices were observed at the following locations:</p> <ul style="list-style-type: none">• 60-ft – B leg flange• 80-ft – B leg flange <p>Recommendation: Install a pal nut on the flange bolt or install a monitor line on the nut.</p>




EXECUTIVE SUMMARY

Photographs	Observations and Recommendations
	<p><u>B.2. Rust and/or corrosion condition including mounts and accessories</u></p> <p>Observation: Corrosion was observed at the following locations:</p> <ul style="list-style-type: none">• A leg at 80-ft• C leg gusset plate at 100-ft• CA face diagonal members from 5-ft to 100-ft• BC face diagonal at 124.5-ft <p>Recommendation: Thoroughly clean all areas of corrosion and apply two coats of a brush-on cold galvanizing compound containing at least 95% zinc.</p>






EXECUTIVE SUMMARY

Photographs	Observations and Recommendations
 The photographs show three different views of the tower's metal structure. The top photo shows a close-up of a vertical tower member with several bolts and nuts. The middle photo shows a horizontal bracing member connected to the tower with a large bolt. The bottom photo is a close-up of a bolt on a horizontal member, showing significant rust on the threads and the nut. The tower is situated in a wooded area with a parking lot and buildings visible in the background.	<p><u>B.2. Rust and/or corrosion condition including mounts and accessories</u></p> <p>Observation: Surface corrosion was typical on bracing member bolts throughout the tower.</p> <p>Recommendation: Thoroughly clean all areas of corrosion and apply two brush coats of a cold galvanizing compound containing at least 95% zinc. If during this process any section loss is observed, replace the hardware with one of equal size and grade.</p>



EXECUTIVE SUMMARY

Photographs	Observations and Recommendations
	<p><u>D.2. Corrosion</u></p> <p>Observation: Corrosion was observed on ground bar connection hardware at the tower base.</p> <p>Recommendation: Thoroughly clean all areas of corrosion and apply two brush coats of a cold galvanizing compound containing at least 95% zinc. If during this process any section loss is observed, replace the hardware with one of equal size and grade.</p>
	<p><u>D.3. Lightning protection (secured to structure)</u></p> <p>Observation: The lightning rod is bent.</p> <p>Recommendation: No action is required.</p>
	



APPENDIX A: TOWER PLUMB AND TWIST MEASUREMENTS

Table A-1: Lateral Deflection Measurements

	Reference Elevation (above conc.)	Resultant Deflection (in)	Allowable Resultant Deflection (in) per TIA	Resultant Deflection Between Reference Elevations (in)	Allowable Deflection Between Reference Elevations (in) per TIA
Tower Plumb	150-ft	0.00 OK	± 4.50		
				0.19 OK	± 0.30
	140-ft	0.19 OK	± 4.20		
				0.08 OK	± 0.60
	120-ft	0.11 OK	± 3.60		
				0.05 OK	± 0.60
	100-ft	0.17 OK	± 3.00		
				0.17 OK	± 0.60
	80-ft	0.00 OK	± 2.40		
				0.00 OK	± 0.60
	60-ft	0.00 OK	± 1.80		
				0.00 OK	± 0.60
	40-ft	0.00 OK	± 1.20		
				0.00 OK	± 0.60
20-ft	0.00 OK	± 0.60			
			0.00 OK	± 0.60	
0-ft	0.00 OK	± 0.00			



Table A-2: Tower Twist Measurements

	Reference Elevation (above conc.)	Twist with Respect To Base (°)	Allowable Twist with Respect To Base (°)	Relative Twist Between Reference Elevations (°)	Allowable Twist Between Reference Elevations (°)
Tower Twist	150-ft	0.00 OK	± 5.00		
				0.00 OK	± 0.5
	140-ft	0.43 OK	± 5.00		
				0.24 OK	± 1.00
	120-ft	0.19 OK	± 5.00		
				0.04 OK	± 1.00
	100-ft	0.15 OK	± 5.00		
				0.15 OK	± 1.00
	80-ft	0.00 OK	± 4.00		
				0.00 OK	± 1.00
	60-ft	0.00 OK	± 3.00		
				0.00 OK	± 1.00
	40-ft	0.00 OK	± 2.00		
				0.00 OK	± 1.00
20-ft	0.00 OK	± 1.00			
			0.00 OK	± 1.00	
0-ft	0.00 OK	± 0.00			

Method: SST

A transit was used at a distance approximately the tower height away to record the twist and plumb data. The base of the tower was used as the reference point. The relative displacement was measured at each section flange. The transit sight was inverted and the displacement was measured again to eliminate possible discrepancies. This process was repeated at the A, B, and C legs. Overall displacement was calculated and compared to tolerances per: ANSI/TIA-222-H.

