

**HELICAL PREVENTATIVE MAINTENANCE INSTRUCTIONS**

**SAFETY GUIDELINES**

- 1) Prior to climbing any antenna supporting structure, or using any other means required to inspect the antenna above ground level, a qualified technician should ensure that they are in compliance with and adhere to all safety regulations.**
- 2) Keep away from live circuits. Operating personnel must at all times observe all safety regulations, to prevent serious injury or death due to electrical shock. Do not service or adjust alone. Under no circumstances should any person service or adjust the equipment except in the presence of someone who is capable of rendering aid.**
- 3) Personnel working with or near high voltages should be familiar with modern methods of resuscitation.**
- 4) Ensure that the transmitting equipment is de-energized prior to inspection of the antenna. Make sure the test equipment is properly grounded, to prevent electric shock.**
- 5) Make sure the antenna is properly supported before removing its mounting hardware.**

Maintenance of TACO Helical antennas are limited to external components including cables and connectors. If you have any questions concerning maintenance, contact TACO Antenna Customer Service. Be prepared to communicate any defects to ground personnel so that they can be properly noted and repairs completed by qualified technicians.

**Visual Inspection of Antennas and Cables**

This inspection is normally conducted several times at random throughout the year during routine site visits. A qualified technician should look for evidence of wind or ice damage to the antennas and antenna cables, and for evidence of antenna movement due to loose mounting hardware and for broken cable fasteners. Inspect for broken standoffs between the Antenna mast and helix. Ensure that the connection between the helix strap and the transformer / connector assembly is secure and free of oxidation. Inspect the ground plane for loose or damaged hardware.

**Annual or Semi-Annual inspection:**

At least once each year it is recommended that a qualified technician should perform a complete inspection of the antenna support structure and all antennas, cables and connections. In harsher climates this inspection should be done each spring and again in the fall. Antennas should be inspected for signs of corrosion, ice damage and loose elements. Helix standoffs should be inspected for wear and cracks. All antenna hardware and mounts should be tightened and secure. Inspect all metallic material for corrosion or sign of rust. Connectors should be checked to ensure tightness and proper waterproofing. Cables should be fastened to the tower at regular intervals. Cable loops and horizontal runs should be fastened under tower members to avoid damage from falling ice. Periodic removal of the antenna cable connection and cleaning of any corrosion may be needed to maintain accuracy of the measurements. An inspection to determine the need for cleaning should be made at least every six months. More frequent inspection may be needed depending on the atmosphere and the environment in which the antenna is used.