



# Case Study

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## **OEM – Sports & Recreation Industry**

### **Technical situation**

Customer had multiple technical issues with an antenna project. The antennas were presenting field failures withstanding adverse environmental conditions (product was required to operate in 200+ MPH winds while maintaining aerodynamic drag and physical dynamics) and posing certain broadcasting issues. The main requirements from the customer were to provide a solution that stabilized the antenna, eliminated harmonics and established a dominant frequency signal.

### **Solution**

In an effort to create a foundational base that would stabilize and enhance the electrical and physical properties of the antenna PRS recommended a two part potting compound. This chemistry provided electrical insulation, thermal conductivity, high voltage insulation, physical strength, vibration and motion control. It also improved cosmetics and hid connections. To deal with the harmonics in the antenna PRS recommended a spring stainless steel wire with a solder ball at the tip of the wire. Multiple cleaning baths were implemented throughout the process to promote proper adhesion, including a hydrochloric acid to remove inorganic contaminants.

### **Benefits**

First articles were submitted for approval and passed testing the first time, meeting engineering specifications and actually raising technical performance standards. The program ran for over 10 years demonstrating exceptional customer satisfaction.