

# Smart Aligner – Custom Brackets Course



*MultiWave Sensors*

# Topics Covered

Note: This training course assumes that the Introductory Course has been completed and the user is familiar with the basic operation of the Smart Aligner System.

- |                                    |                |
|------------------------------------|----------------|
| 1. Custom Bracket Definition:      | Slide 3        |
| 2. Gogo Bracket:                   | Slides 4 - 7   |
| 3. Symmetric RF Elements Bracket:  | Slides 8 - 11  |
| 4. Asymmetric RF Elements Bracket: | Slides 12 - 16 |
| 5. AIR 1641 Bracket:               | Slides 17 - 19 |



# Custom Bracket Definition

1. The Smart Aligner System has insert options that attach to the standard Bracket to change its characteristics. It uses the Ratchet Strap around the antenna to fasten it in place. The Tool mounts on the Bracket as usual.
2. A Custom Bracket does not use the standard Bracket at all. It is a stand-alone mounting device that replaces the need for the Bracket, with or without an Insert.
3. Custom Brackets are designed for specific antennas as can be seen on the following slides.



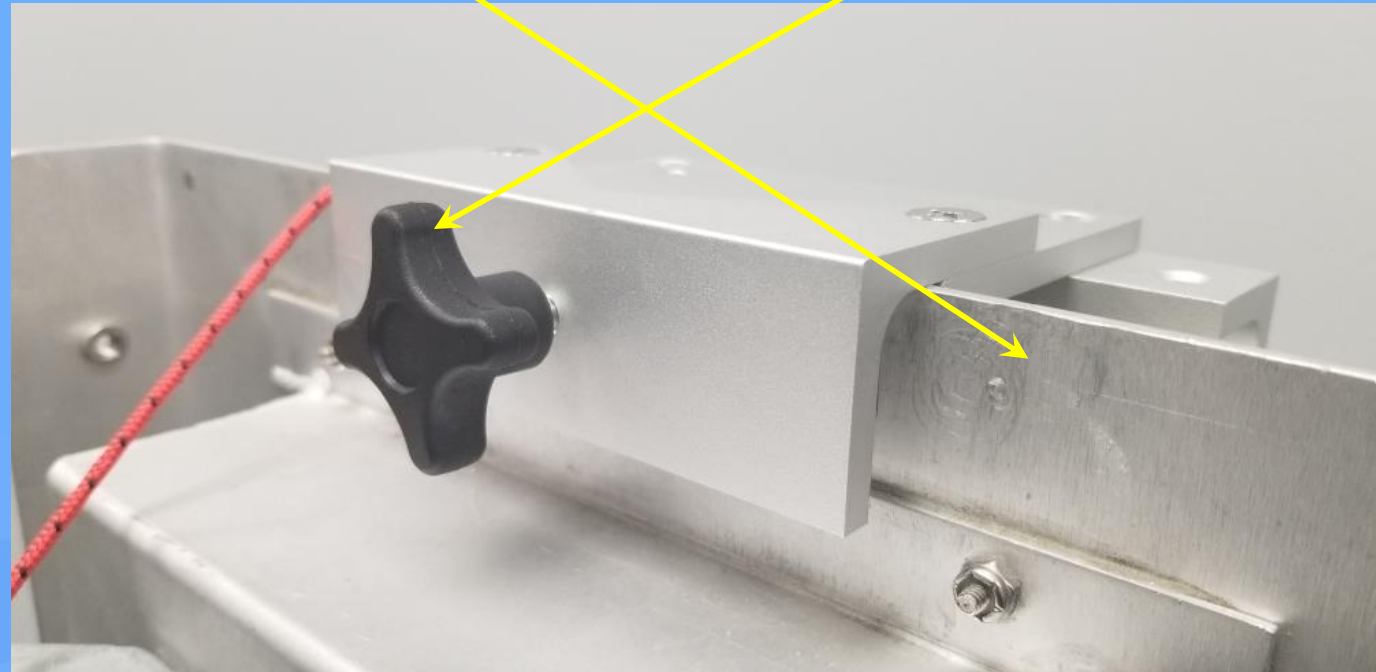
# GOGO Bracket

1. The GOGO Bracket is designed specifically for GOGO antennas and is approved by GOGO. The GOGO Bracket is shown below:



# GOGO Bracket

2. First attach the Tether as usual.
3. To install the Gogo Bracket, unscrew the Knob until the Bracket can fit over the vertical fin of the antenna.



# GOGO Bracket

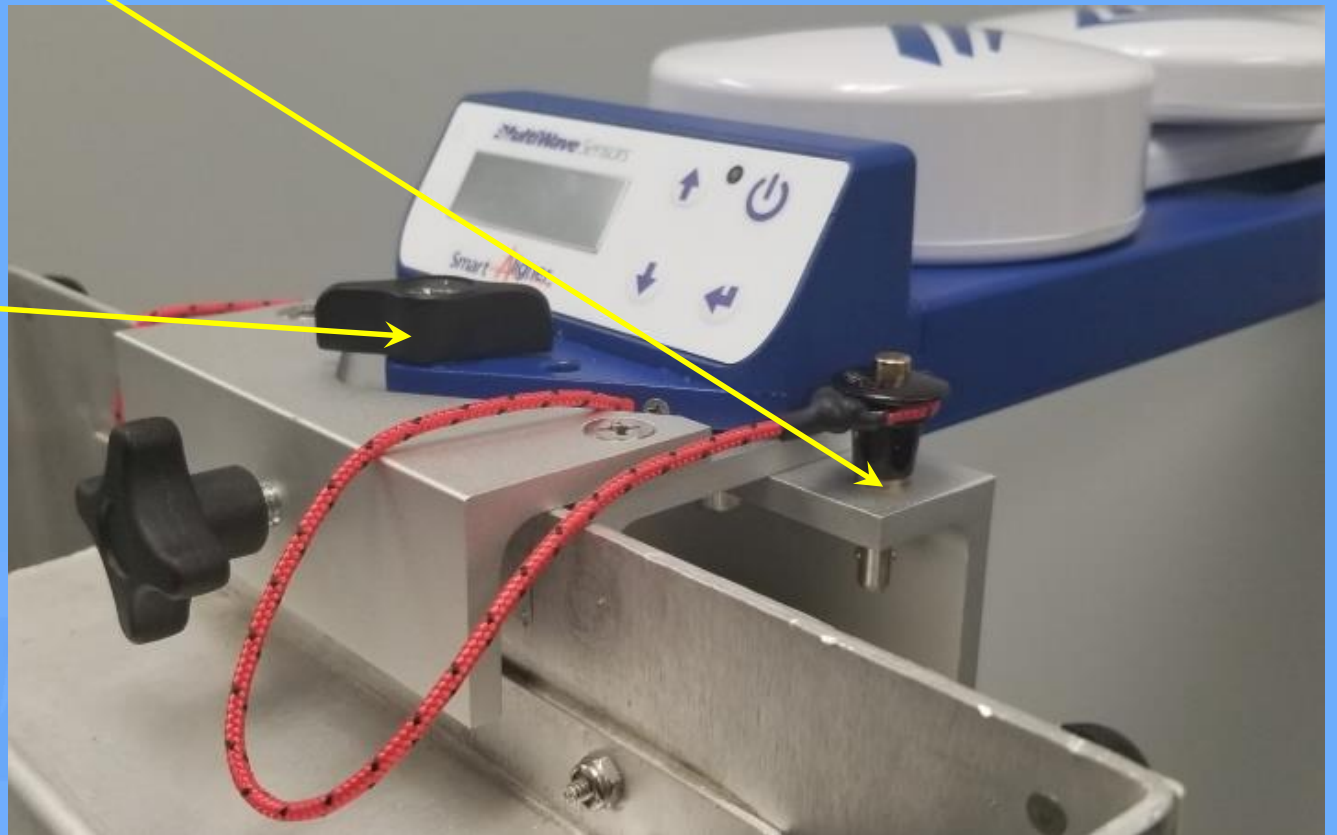
4. The Gogo Bracket should sit as per the following side view:



5. Tighten the Knob until secure.

# GOGO Bracket

6. Attach Tool's Tether into the hole provided.
7. Place Tool into the mounting pattern and tighten Tool Fastening Knob.
8. Use the Tool to perform the alignment as usual.





# Symmetrical RF Elements Bracket

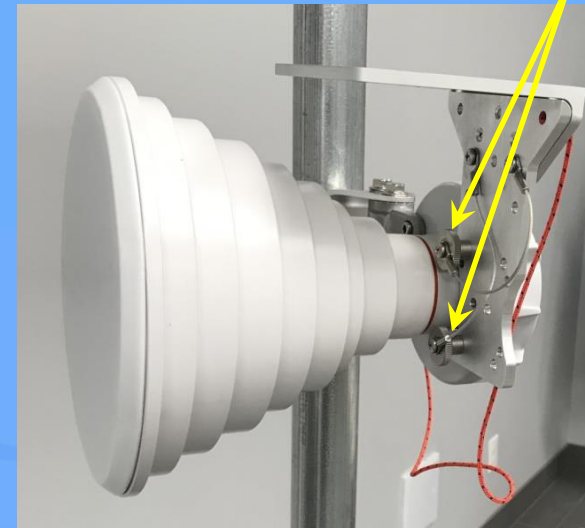
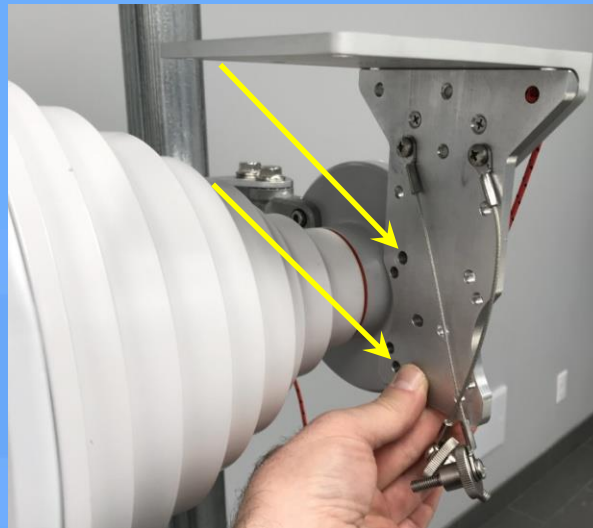
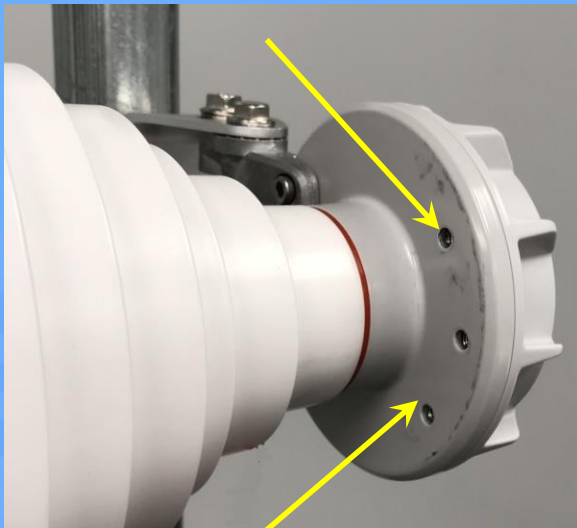
1. The RF Elements Bracket was designed in cooperation with RF Elements for Gen2 Symmetrical Horns. It works with all HG3-xx-Sxx Horns.





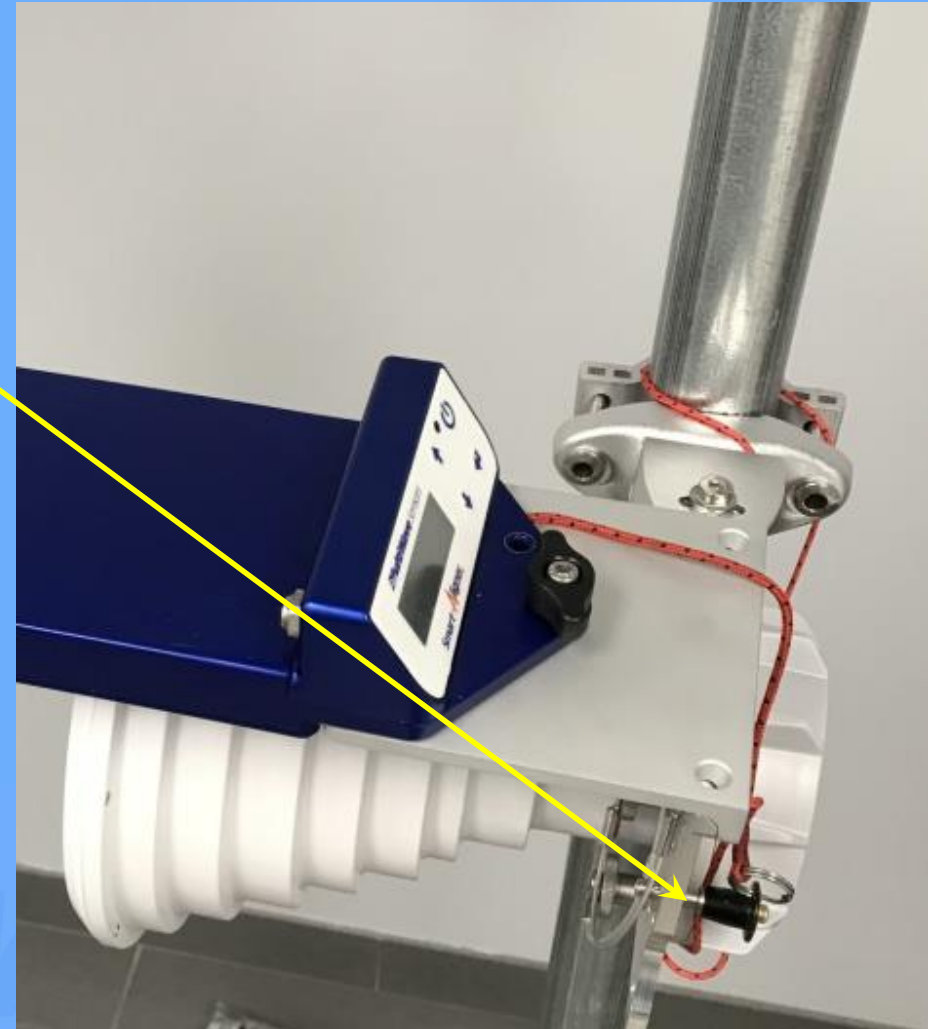
# Symmetrical RF Elements Bracket

2. Bracket is mounted into the upper and lower holes.
3. Tether the Bracket as usual.
4. There are multiple hole patterns for different antenna models. Hold the Bracket up to the holes and determine which pattern matches.
5. Fasten the Bracket in place with the supplied tethered screws.



# Symmetrical RF Elements Bracket

6. Insert the Tool's Tether into the hole provided.
7. Mount the Tool in the desired orientation and fasten as per usual.



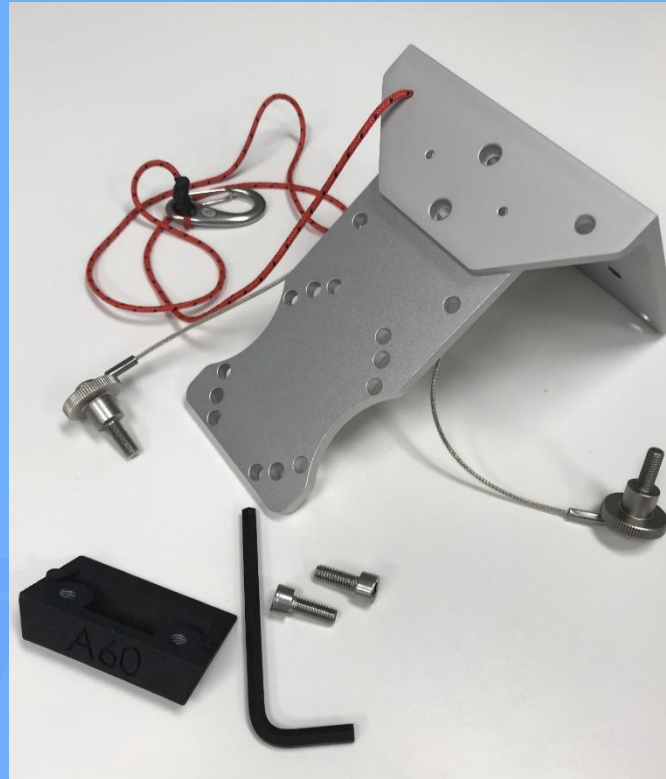
# Symmetrical RF Elements Bracket

8. Align the antenna as per usual.



# Asymmetrical RF Elements Bracket

1. Wedge Inserts can be used with the standard RF Elements Bracket to adapt to asymmetrical horns.



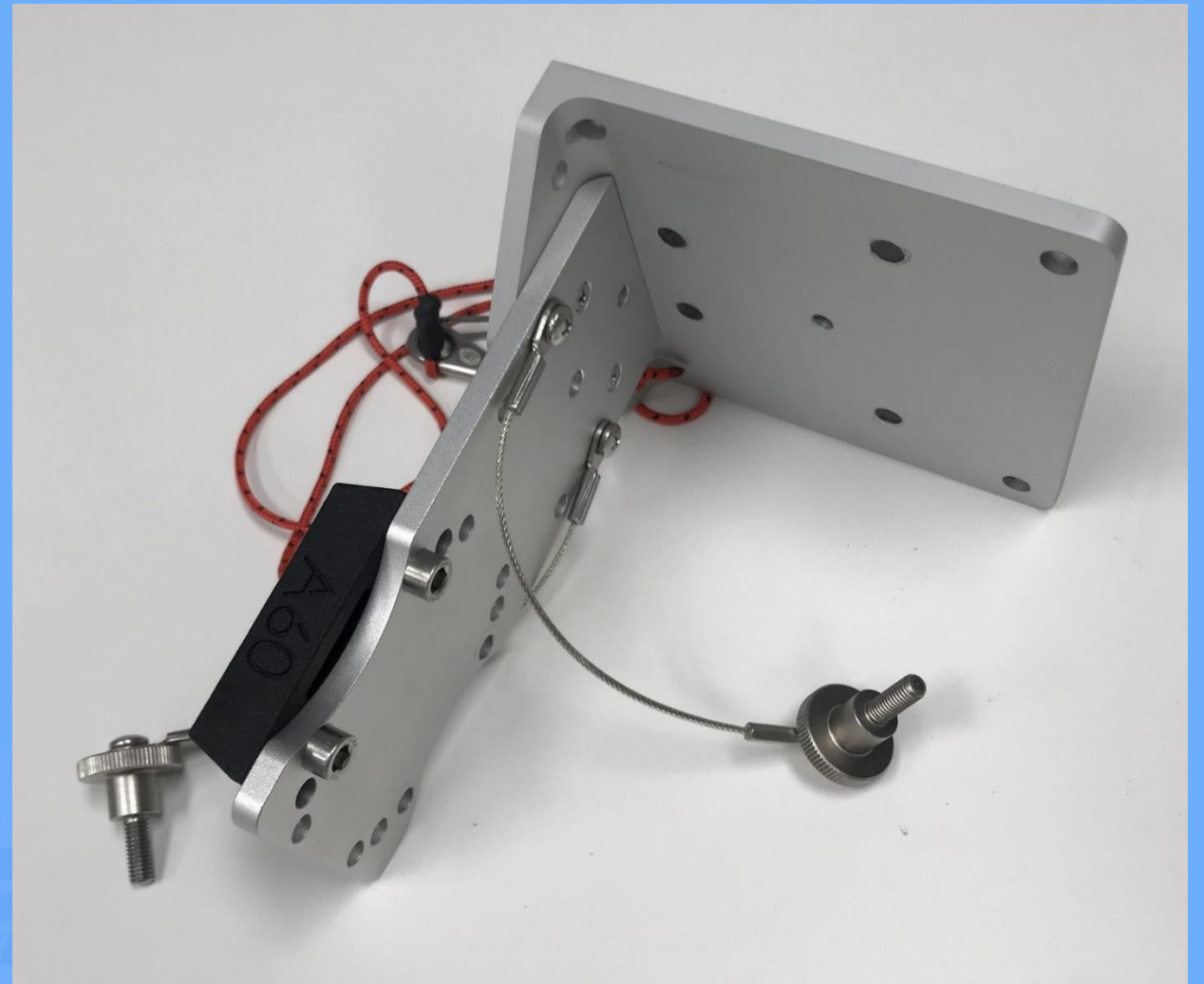
# Asymmetrical RF Elements Bracket

2. The A20-30 Horn does not require a Wedge Insert. The A60 Horn has a specific Wedge Insert as does the A90 Horn.
3. All asymmetric horns require the RF Elements Bracket to be mounted to the left or right side of the horn.
4. The following example will show how the A60 Wedge Insert is installed so that the RF Elements Bracket points to the left of the A60 Horn.



# Asymmetrical RF Elements Bracket

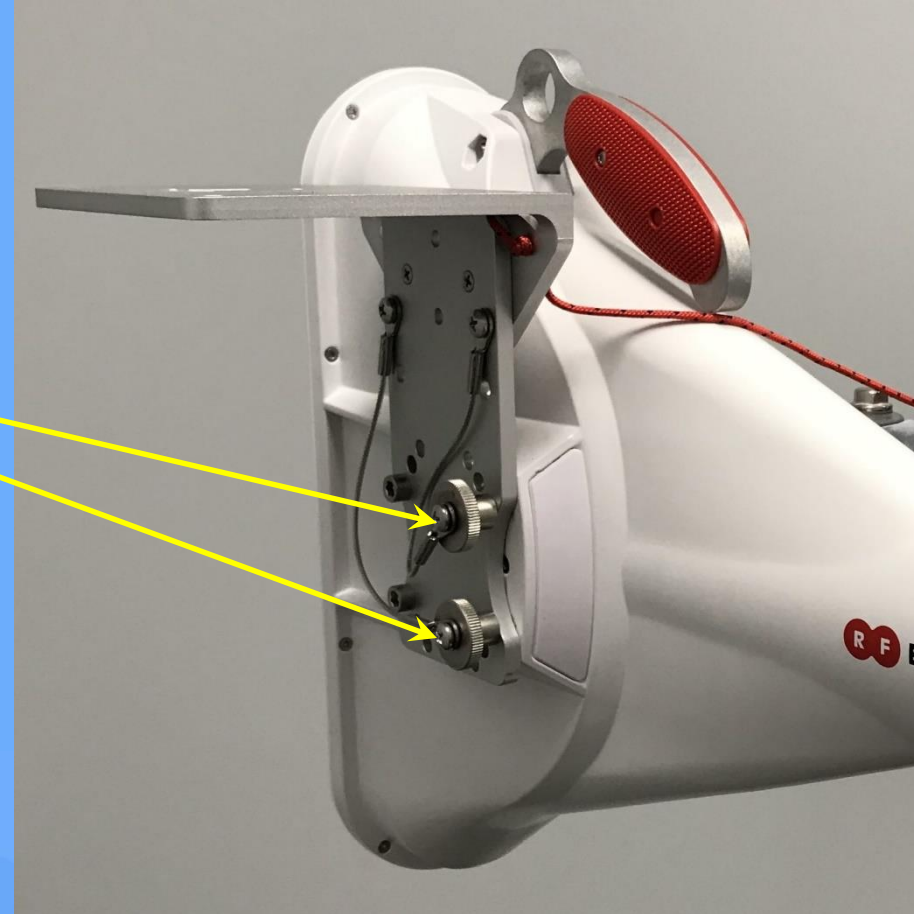
5. Using the screws and Allen key provided, mount the A60 Wedge Insert as seen to the right. The thicker part of the Wedge Insert with the A60 lettering is on the outside edge. There are alignment pegs on the Wedge Insert to help with the installation.





# Asymmetrical RF Elements Bracket

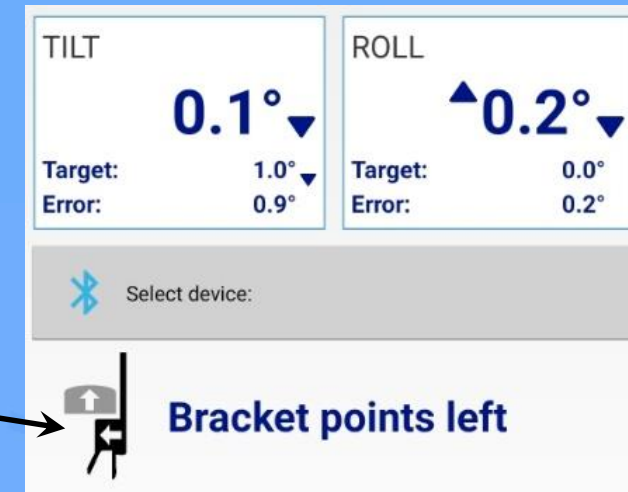
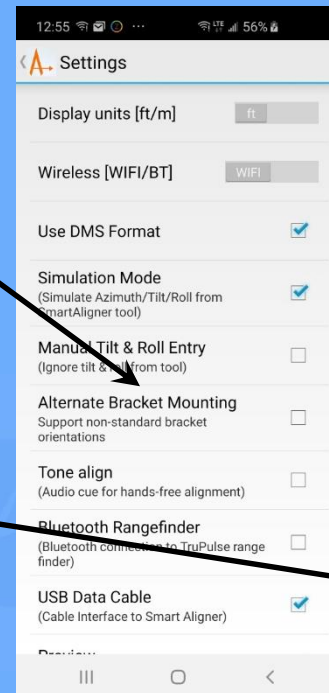
6. Mount the RF Elements Bracket, as per the photo to the right, using the usual thumbscrews.
7. The RF Elements Bracket mounts the same way to the A20-30 Horn (left or right side), but it does not require a Wedge Insert.





# Asymmetrical RF Elements Bracket

8. Mount the Tool as usual.
9. Since the bracket's antenna arrow is not pointing in the same direction as the antenna (in this case to the left), the Alternate Bracket Mounting should be checked in the app and the left position selected on the measuring screen.



# AIR 1641 Bracket (pictures to be added)

1. This Bracket was designed to attach to the mounting bracket of the AIR 1641 Antenna. As such, it will fit a number of AIR models using that mounting bracket.



# AIR 1641 Bracket (pictures to be added)

2. First tether the bracket as usual.
3. Make sure that the Catch Plate is vertical before inserting into the oval cut-out.
4. Rotate the Catch Plate horizontally.



# AIR 1641 Bracket (pictures to be added)

5. Hold the Bracket firmly against the side of the Mounting Plate of the antenna and push the Fastening Lever down to lock.
6. Attach the Tool's tether into the hole as shown.
7. Mount the Tool and align the antenna as normal.



# Course End

The logo for MultiWave Sensors, featuring a stylized wave icon to the left of the text "MultiWave Sensors". The text "MultiWave" is in a bold, sans-serif font, and "Sensors" is in a lighter, italicized sans-serif font.