

# Smart Aligner – Ericsson AIR Antennas 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.

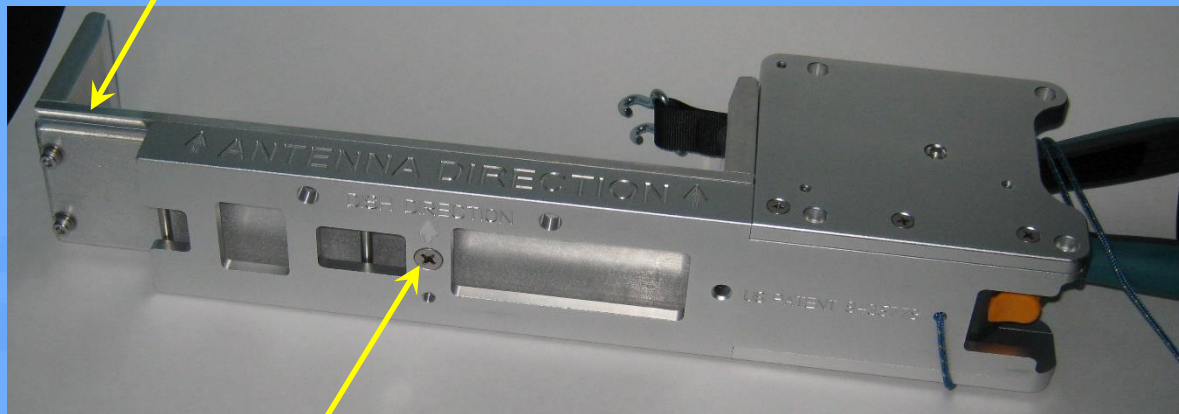
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|---------------------------------|-------|---------|
| 1. AIR 21 Antenna:              | Slide | 3 - 4   |
| 2. AIR 32 and AIR 32D Antennas: | Slide | 5       |
| 3. AIR 3246 Antenna:            | Slide | 6       |
| 4. AIR 5121/5331 Antennas:      | Slide | 7       |
| 5. AIR 6419/1649/1641 Antennas: | Slide | 8 - 10  |
| 6. AIR 6488/6468 Antennas:      | Slide | 11      |
| 7. AIR 6449 Antenna:            | Slide | 12 - 14 |



# AIR 21 Insert

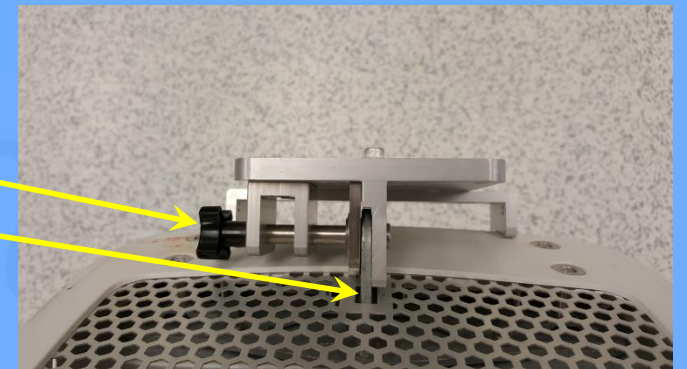
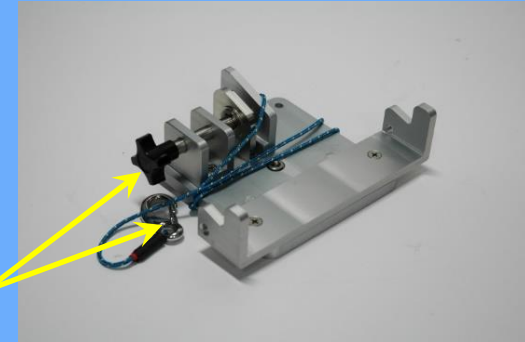
The Ericsson approved AIR 21 Insert allows the bracket to be fastened to the AIR 21 antenna without touching the delicate backplane (vent screen). It attaches to the Bracket using the Insert Screw.

U shaped insert that straddles the back of the AIR 21 antenna.



# AIR 21 Bracket

1. The Ericsson approved AIR 21 Bracket is a stand-alone bracket that is attached to the upper lifting ring.
2. First attached the tether to the support structure.
3. Unscrew the black knob and pull out.
4. Place bracket over front edge of the antenna with the lifting ring through the middle two vertical plates.
5. Push the knob back in and tighten the knob.
6. Tether the tool to the bracket as usual.
7. Fasten the tool to the bracket as usual.

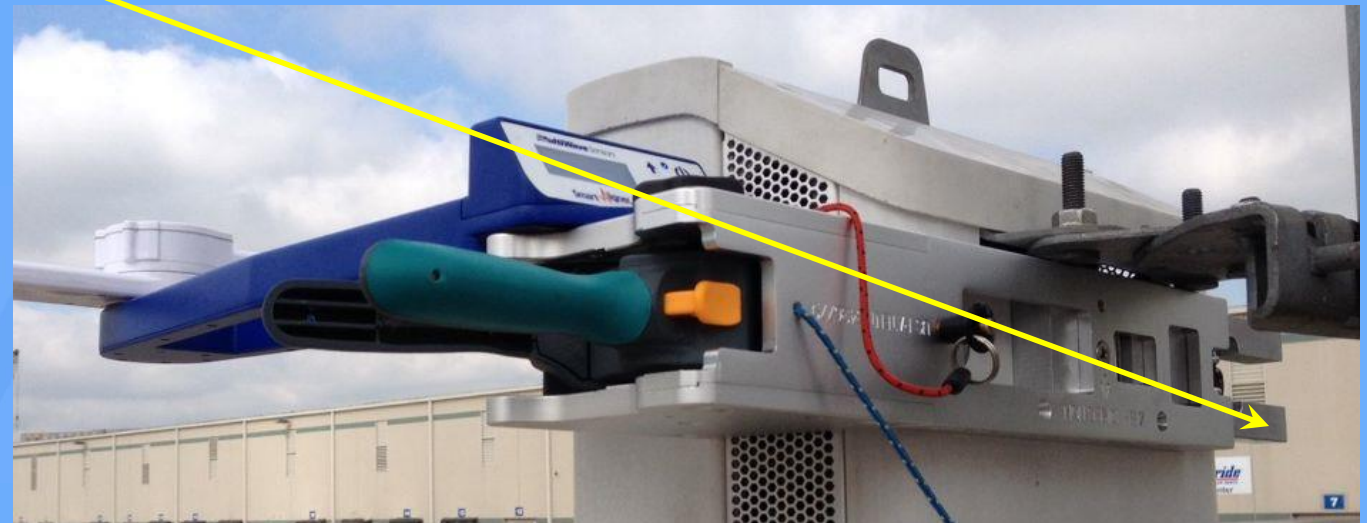
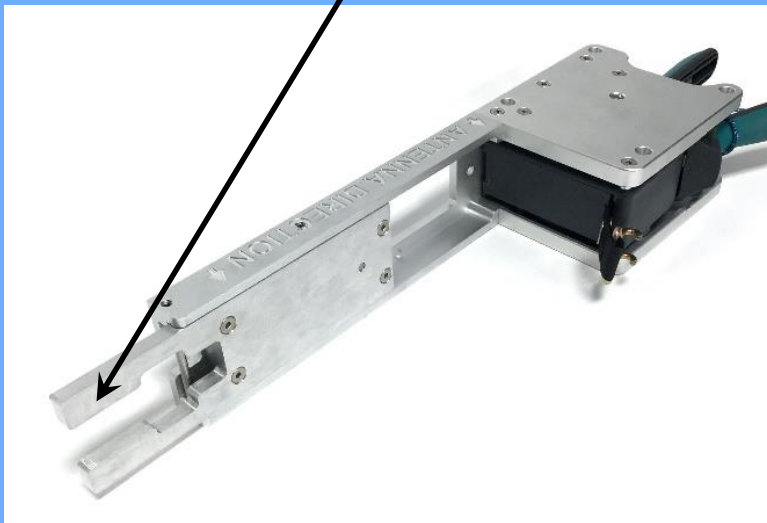


# AIR 32 and AIR 32D Insert

The Ericsson approved AIR 32 Insert increases the Channel length from 10" to 12.5". This increased length allows the Channel to span both corners of the flexible backplane for accurate referencing.

**This insert is not mandatory if the bracket is located at the top of the antenna just below the upper mounting plate as shown.**

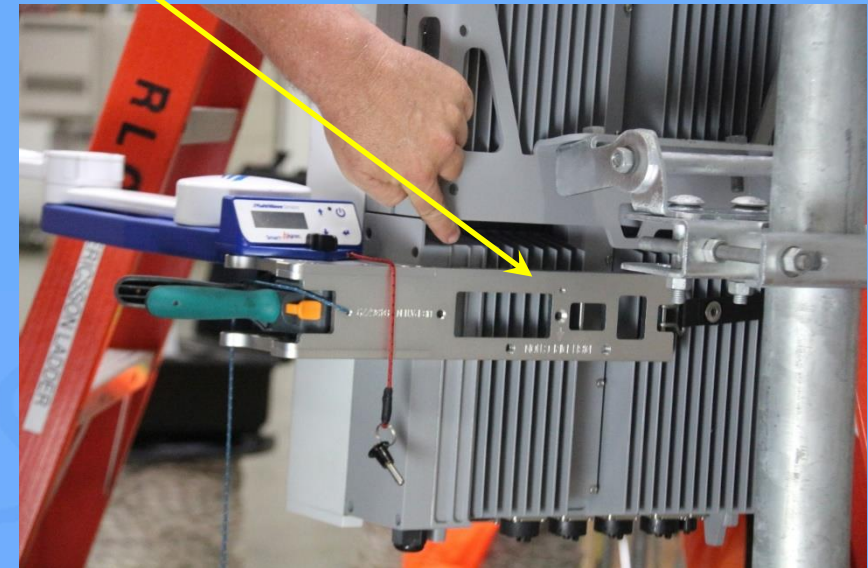
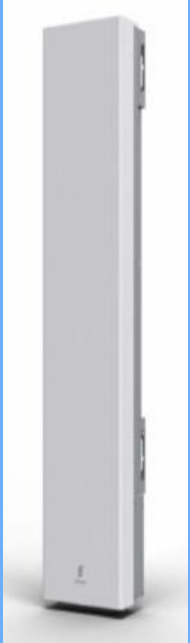
AIR 32 Insert





# AIR 3246 Antenna

The Ericsson approved method for aligning the AIR3246 antenna is to mount the standard bracket at the bottom of antenna, near the DC power wire access panel door. The single strap is tightened and the tool is mounted on the bracket. The installer shall use the cooling fins to orientate the tool in a plumb position. Installer waits for satellite acquisition to obtain azimuth readings.

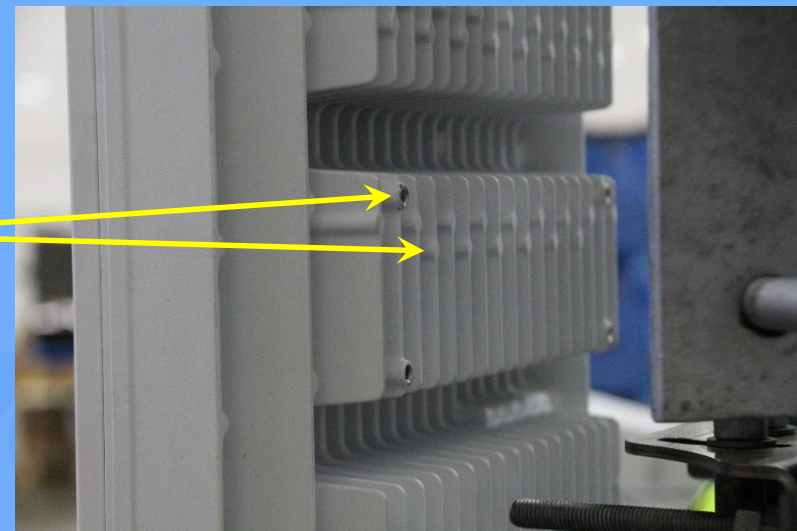


# AIR 5121 and AIR 5331 Antennas

Ericsson has approved the standard mounting bracket for aligning the AIR 5121/5331 antenna.



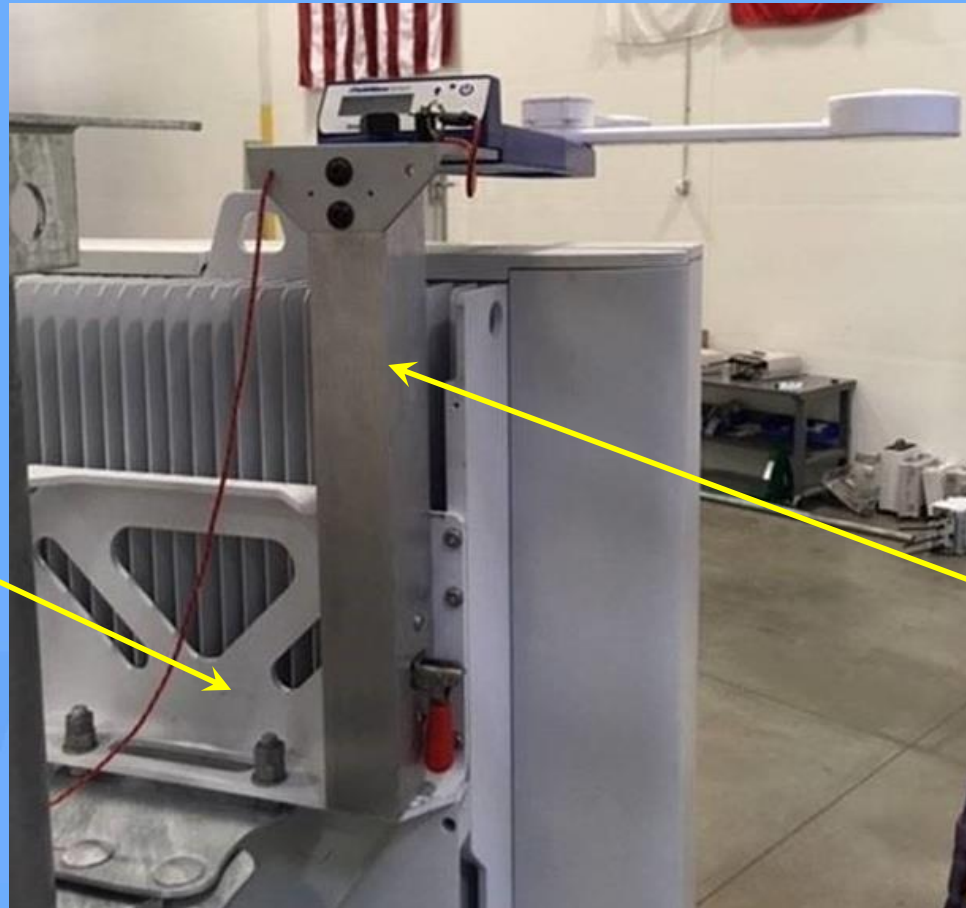
**Note: When placing the bracket on the back of this antenna, ensure that the channel edges do not rest on the screw standoffs and nubs as shown.**



# AIR 6419/1649/1641 Bracket

The Ericsson approved AIR 6419/1649/1641 Bracket mounts to the right side of the antenna's upper mounting bracket as shown.

Antenna's  
mounting  
bracket

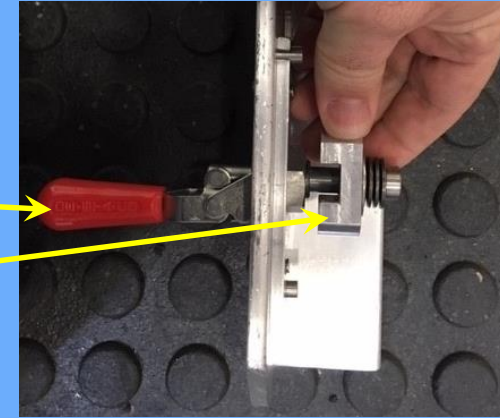


AIR 6419/1649/1641  
Bracket



# AIR 6419/1649/1641 Bracket

1. First tether the bracket as usual.
2. Open the red toggle.
3. Make sure that the Catch Plate is vertical.
4. Insert bracket and Catch Plate then rotate the Catch Plate horizontally.
5. Push the red toggle handle down to lock in place.



# AIR 6419/1649/1641 Bracket

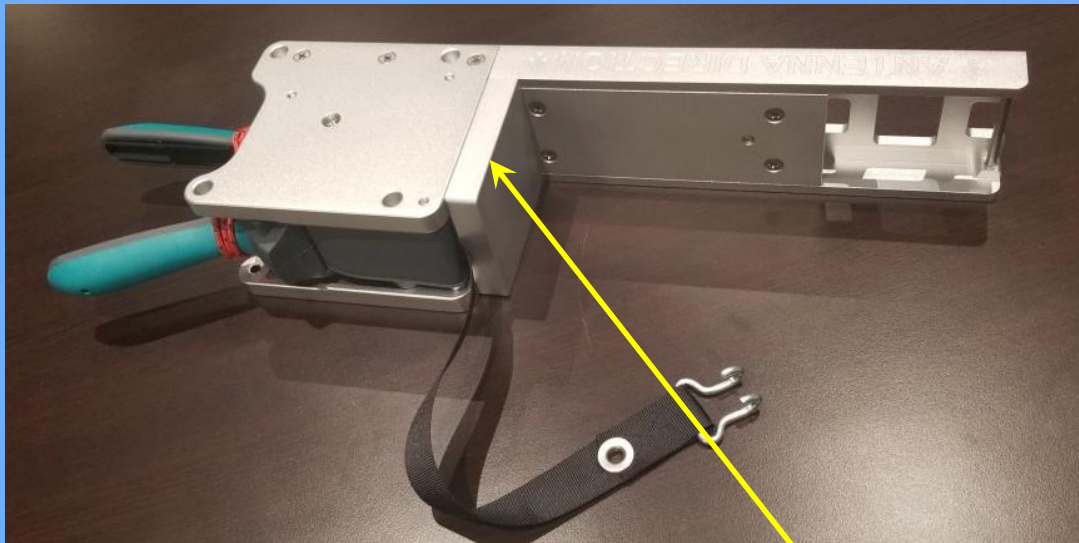


6. Tether the tool to the bracket as shown.
7. Fasten tool to bracket as usual.

Sensors

# AIR 6488/6468 Insert

The Ericsson approved AIR 6488/6468 Insert provides clearance spacing for the cooling fins on the back of this antenna.

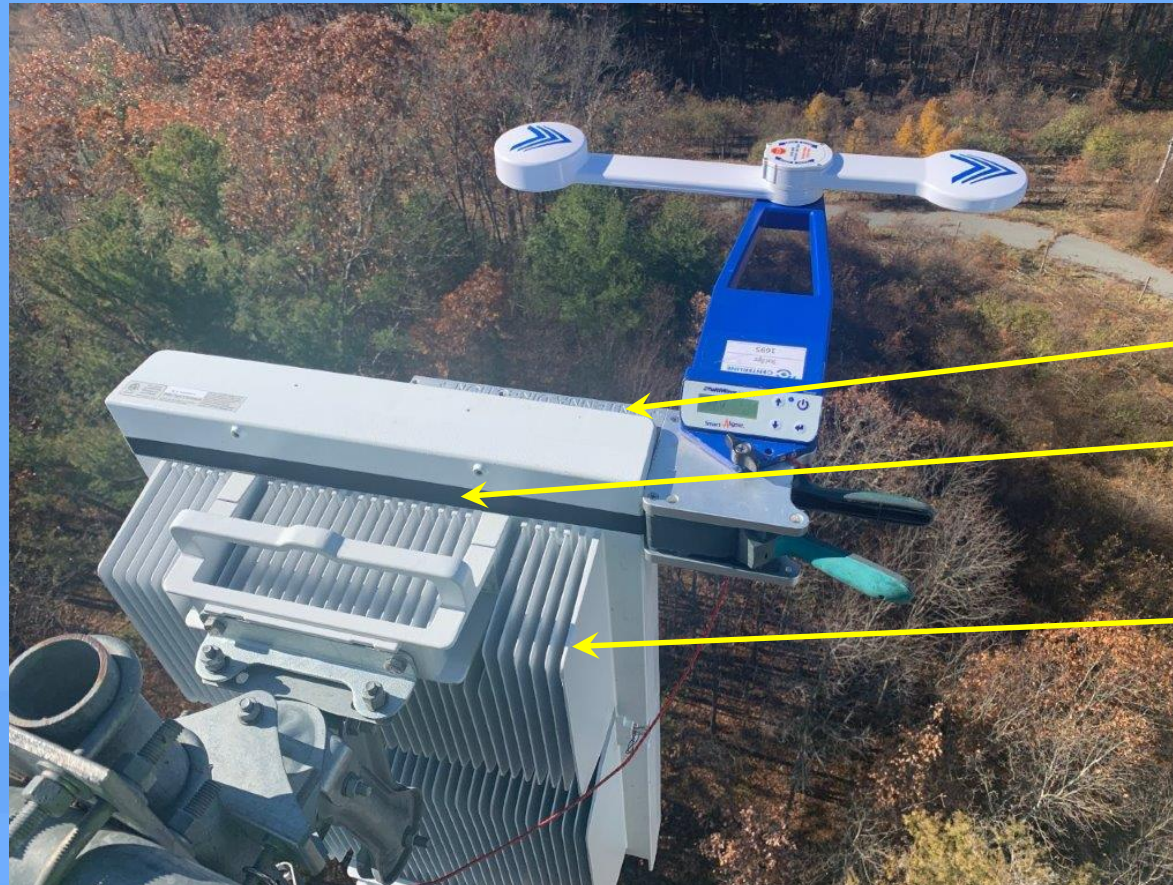


AIR 6488 Insert



# AIR 6449 Antenna

Ericsson has approved mounting the bracket backwards on the AIR 6449 antenna because of the deep cooling fins.

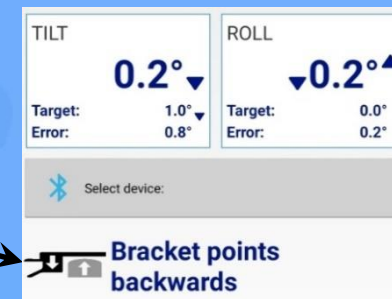
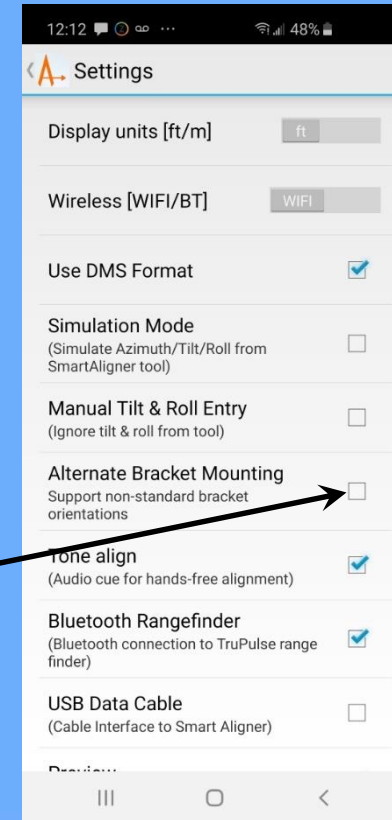


Bracket mounted backwards  
(channel on front and strap on back)

AIR 6499 Antenna

# AIR 6449 Antenna

1. Since the bracket is mounted backwards, the tool will not automatically calculate the azimuth/tilt/roll offsets properly; however, this can be done in the app.
2. Go into the app's Settings and select Alternate Bracket Mounting.
3. In the measurement screen, tap the icon until it reads "Bracket points backwards".





# AIR 6449 Antenna

4. Since the app is making the final offset calculation, the azimuth/tilt and roll on the tool's screen will still not be changed.
5. If local Market COP requirements require a tool screen shot then there will be a discrepancy between the two readings. COP submittal must be a screen shot of the app accompanied by a picture of the tool screen in the same photo.



# 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.