

# Smart Aligner – Universal Bracket and Inserts Course



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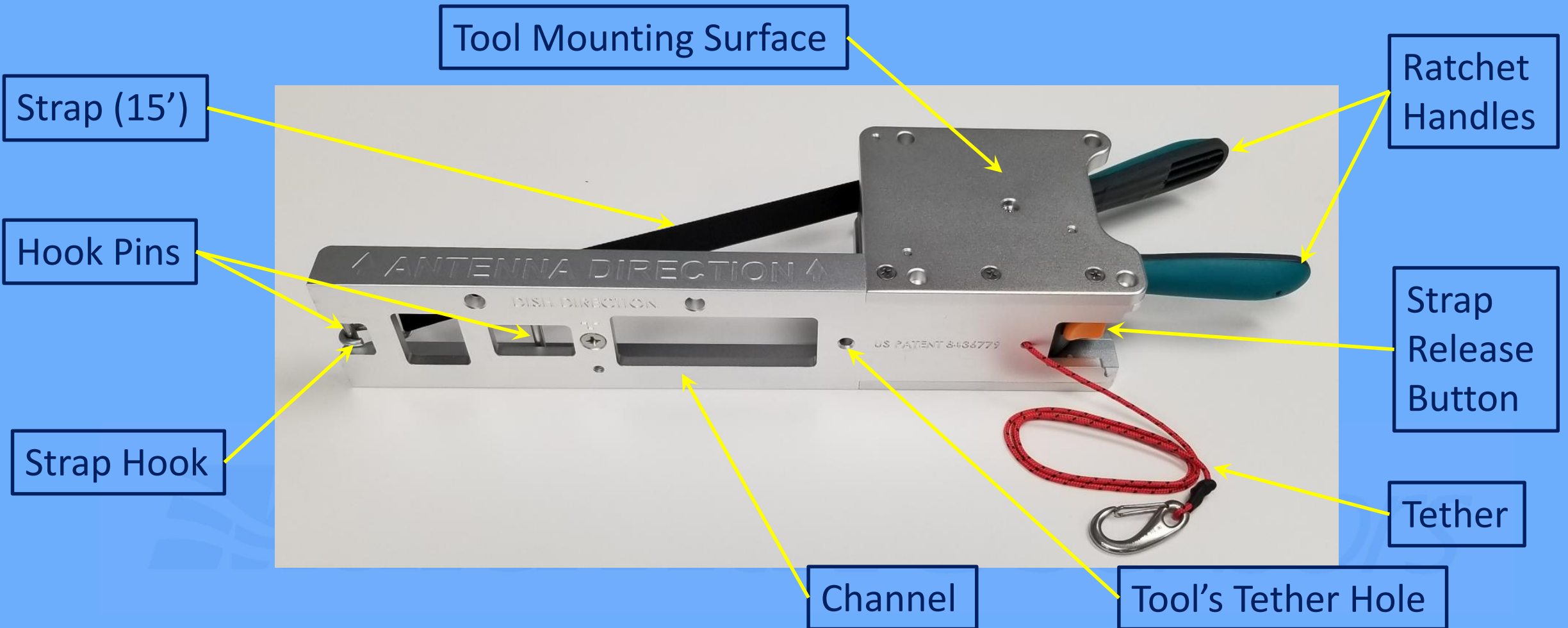
# Topics Covered

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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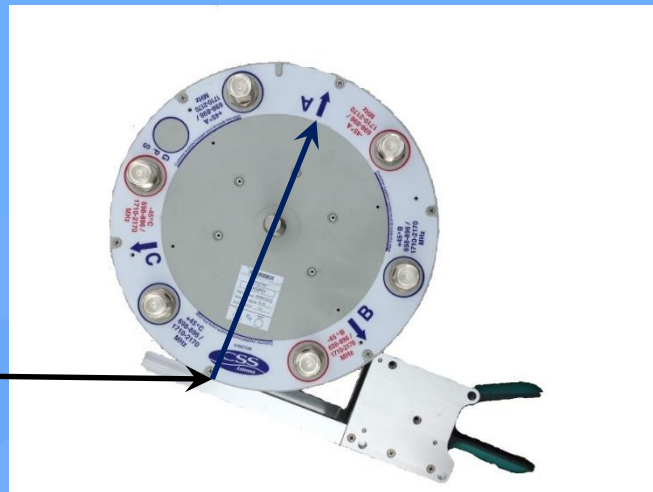
# Universal Bracket

1. The parts of the Universal Bracket (Bracket) are shown below:



# Small Cell Antennas

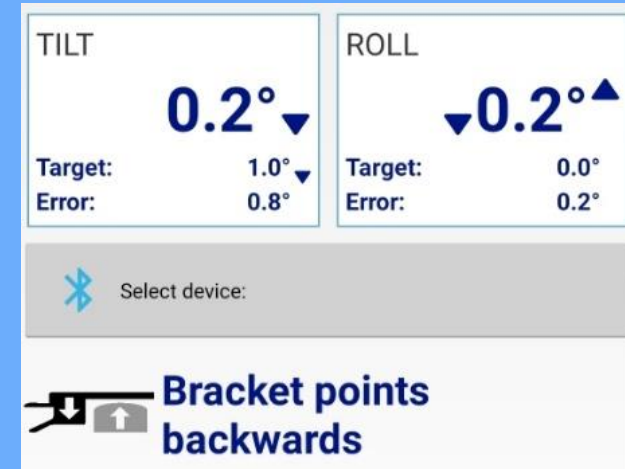
1. In a similar way with microwave dishes with shrouds, the Bracket can also be used on Small Cell Antennas without options.
2. The Channel needs to be tangent to the null axis as can be seen below:



Channel tangent  
to null axis A

# Small Cell Antennas

- Alternatively, the Channel can be oriented tangentially to the primary A axis and use the Alternate Bracket Mounting in the app (Backwards). See Advanced App Course.



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# Ubiquiti Antennas

1. The Bracket Channel is mounted on the front of the Ubiquiti antenna because there is a flat reference surface. Again, the app must reflect the Alternate Bracket Mounting method (backwards).



TILT	0.2°▼	ROLL	▼0.2°▲
Target:	1.0°▼	Target:	0.0°
Error:	0.8°	Error:	0.2°

Select device:

 **Bracket points backwards**

# What is an Insert

1. An Insert is an optional part that attaches to the Channel of the Bracket in order to change its characteristics.
2. If the backplane of the antenna is not flat or requires a longer channel, then an Insert needs to be used.
3. The Bracket with Insert gets attached to the antenna by placing the strap around the antenna. This strap is then tightened by using the Ratchet.



# What is an Insert

4. The Insert is attached to the Channel using the Insert Mounting Screw, which is permanently attached to the Bracket.



Insert Mounting Screw  
(large Phillips head)



# 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).

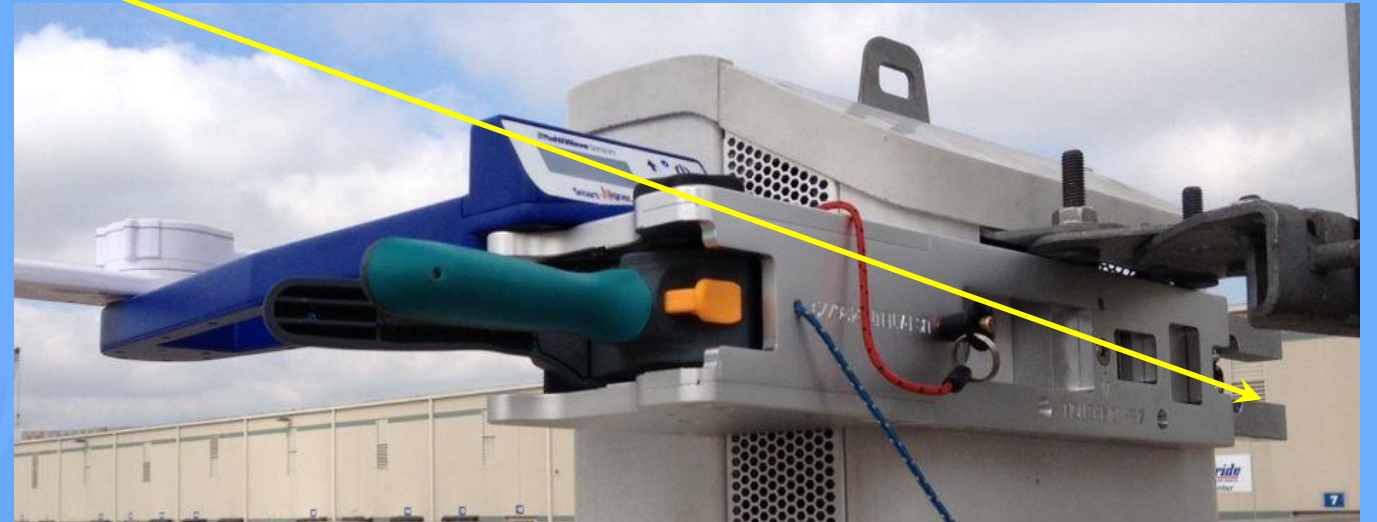
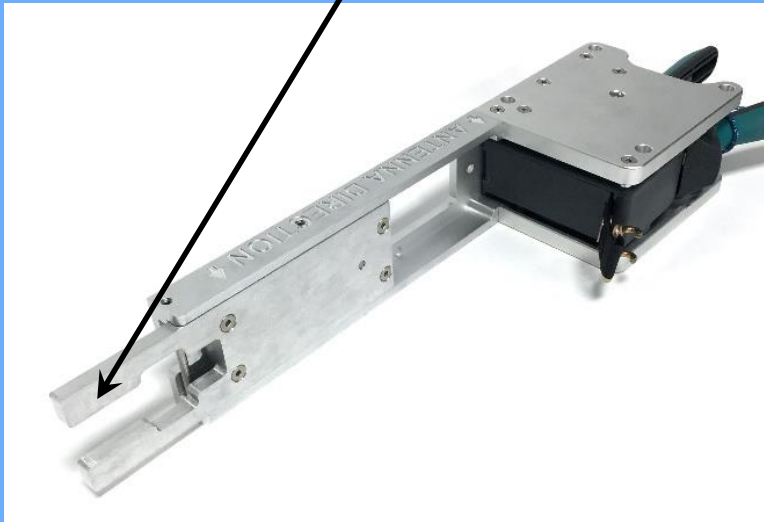
U shaped insert that straddles the back of the AIR 21 antenna.



# AIR 32 Insert

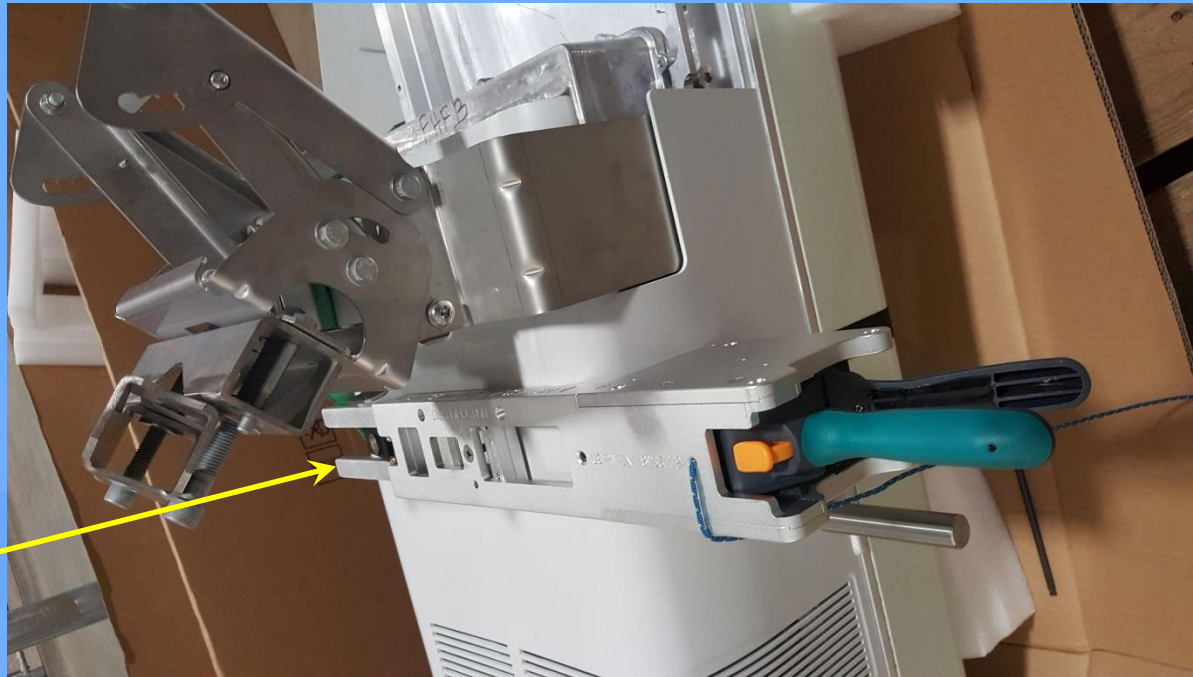
The Ericsson approved AIR 32 Insert increases the Channel length from 10" to 12.5". This increased length allows the Channel to span both corners of the flexible backplane for accurate referencing.

AIR 32 Insert



# Nokia FASB Insert

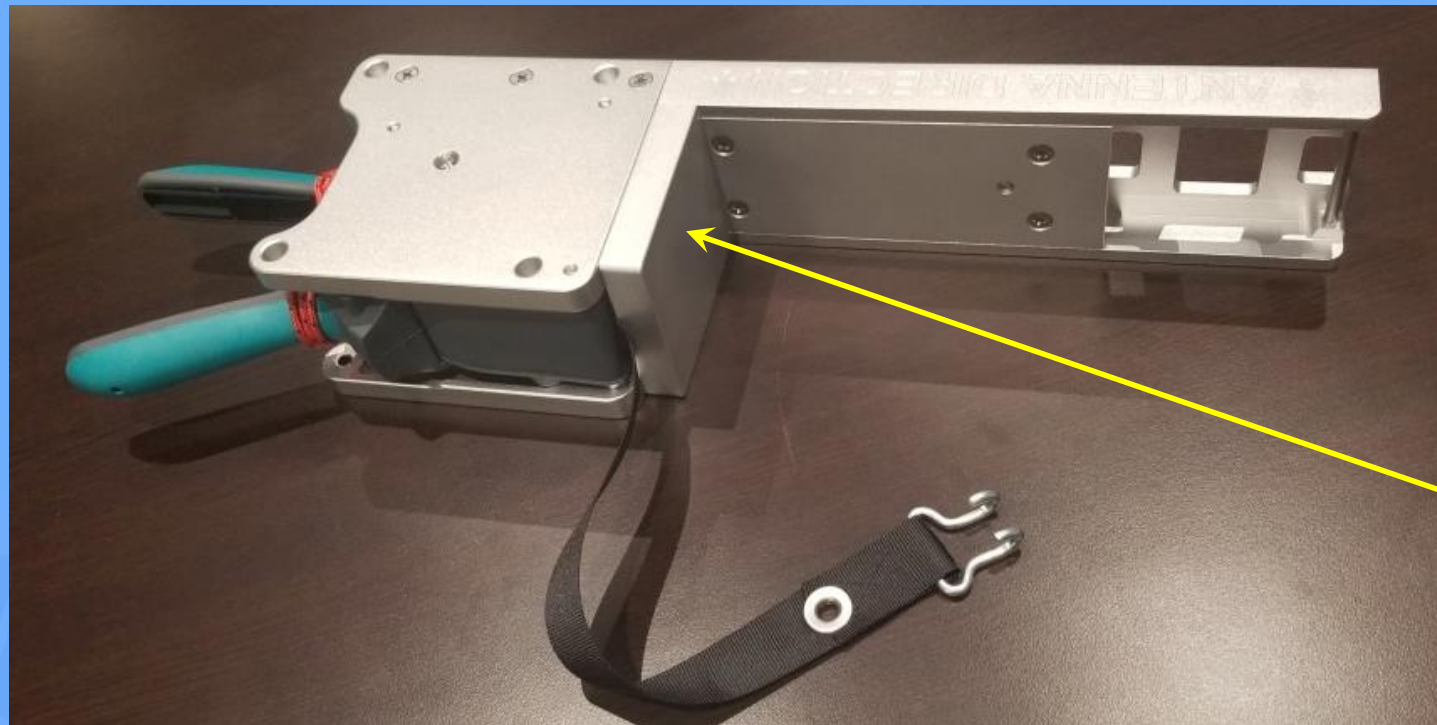
The Ericsson approved Nokia FASB Insert increases the Channel length from 10" to 15". This increased length allows the Channel to span both corners of the flexible backplane for accurate referencing.



Nokia FASB Insert

# AIR 6488 Insert

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



AIR 6488 Insert

# Cambium 450M Insert

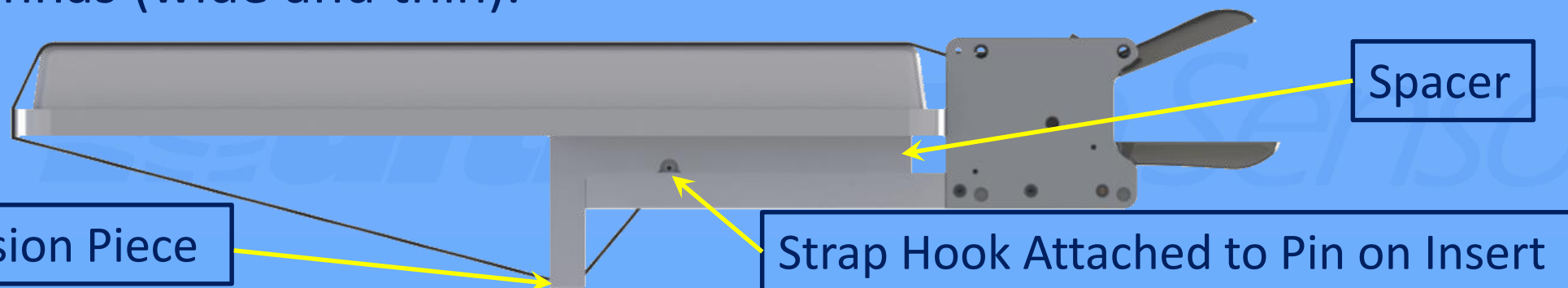
The Cambium 450M antenna is 25" wide and the panel is 2.5" deep, not including the radio. This insert provides a spacer to help secure the front edge of the antenna closest to the Tool base of the Bracket. The insert also has an extension piece, which the strap goes around, in order to secure the other end of the Bracket channel to the antenna. Note: This insert will work on all similarly sized antennas (wide and thin).



Cambium 450M Insert



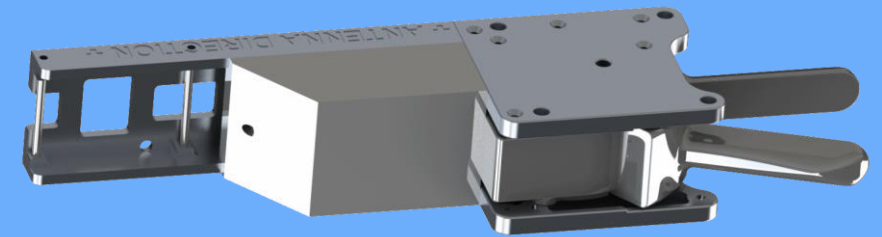
Insert Fastened to Bracket



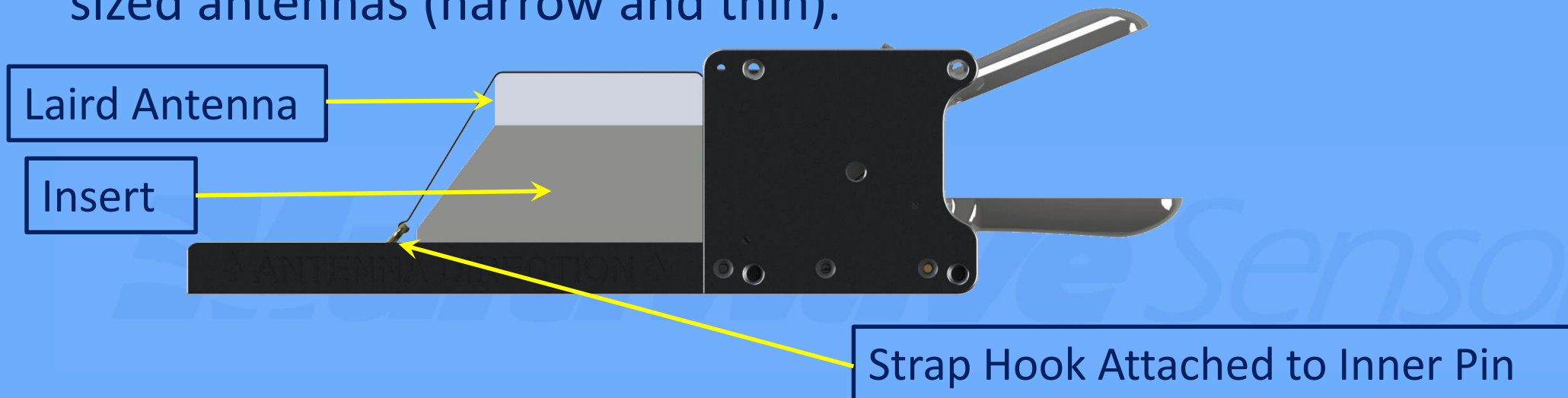
# Laird SAH24-12 Insert

The Laird SAH24-12 antenna is 4" wide and 1" deep. This insert provides a spacer to help secure the front edge of the antenna closest to the Tool base of the Bracket. The strap hook is attached to the inner pin.

Note: This insert will work on all similarly sized antennas (narrow and thin).



Laird SAH24-12 Insert fastened to the Bracket



# Course End

The logo for MultiWave Sensors features a stylized wave icon on the left, followed by the text "MultiWave Sensors" in a bold, italicized sans-serif font. The entire logo is rendered in a light blue color against a darker blue background.