

Procedure 3.150A**NAV AND GLIDE SLOPE ANTENNA INSTALLATION**

In this procedure...

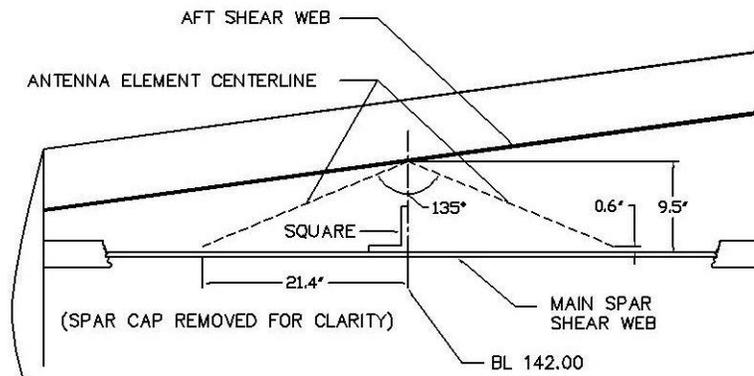
The Nav and Glide Slope Antenna will be installed in the wings and the coax cables routed to the wing root.

For this procedure, the following parts will be required:

<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
119-20-001	Antenna Kit, Nav	2

Step 1. LOCATE THE NAV / GLIDE SLOPE ANTENNA ELEMENTS.

The Nav / GS antenna elements are bonded to the upper wing skin. Their centerlines intersect at BL 142 (Between Ribs C and H), approximately 9.5 inches Aft of the main spar shear web. They are installed at an included angle of 135 degrees.

**Step 2. ATTACH ANTENNA ELEMENTS.**

The antenna elements consist of copper foil tape, with an adhesive backing, which will be attached inside the upper wing skin. Angling the elements forward will improve reception to the sides of the airplane, without degrading forward reception substantially. The elements can be bent slightly to conform to the shape of the wing.

There must be a 3/8" space between the ends of the copper tape elements. When laying the tape, align on the center marks, peel off protective backing and press in place.

Step 3. STRIP COAXIAL CABLE.

Slip the 3 Ferrite toroid beads over the stripped end, and over the insulation. Space them approximately a toroid bead thickness apart. The cable end should be approximately 1" from the intersection of the antenna elements centerlines. Apply silicone rubber compound to hold the toroid in place leaving the stripped leads exposed. Carefully strip one end of the coaxial cable separating the center conductor wire from the braided shield and twist the braided end. Allow the insulation between the leads to extend enough to keep them from touching.

Step 4. ASSEMBLE ANTENNA CONNECTION.

Solder the stripped coax leads to the antenna elements. Be sure to use sufficient heat and solder to make a good solder joint.

Step 5. BOND ANTENNA CONNECTION.

Apply a light coat of resin with a brush to the entire copper tape elements to prevent corrosion. Orient the coaxial cable directly forward between the antenna elements. Make a smooth bend in the cable, after the short straight toroid section, so it runs parallel to the outboard antenna elements toward the wing tip. Laminate the antenna connection to the wing skin with a layer of bid cloth, covering the soldered joints and the toroid beads. Overlap the coaxial cable at least 2" to prevent tugging on the soldered connection. Bond a 2" square of one ply bid cloth every 6" along the coaxial cable from the base of the antenna to the wing tip.

