

INTERNAL ANTENNAS

Some builders have had problems with tail heaviness in the Osprey. Consequently, I decided that a good thing to move forward would be the antennas.

For the com antenna, I used a bent stainless antenna mounted just forward of the L.E. fin spar and molded into the fin L.E. I used a circular doubler glued to the bottom of the deck where the insulators go through. I then positioned another straight antenna parallel to and under the deck so that the feed ends of the two antennas are $\frac{1}{4}$ " away from one another. The horizontal element is supported by plywood tabs.

This is a half-wave center fed antenna. It is fed with a ferrite torroid balun (See article by Jim Wier of RST, Sport Aviation, May 1979, pg. 45).

Using a half-wave antenna eliminates the need for a heavy ground plane on the bottom of the stablizer. It also moved the antenna further forward, decreasing its moment arm.

The nav antenna is a standard type mounted under the floor just aft of the step, with the open end pointed forward. It too is fed with a ferrite balun and is molded into the foam in the bottom. Once again this puts the weight further forward. The drain pipe and plug aft of the step should be made of plastic. The less metal there is near an antenna the better.

INTERNAL ANTENNAS
(NO SCALE)

