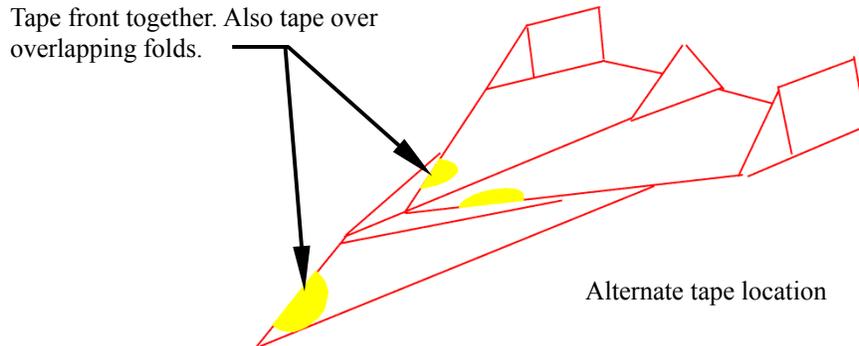
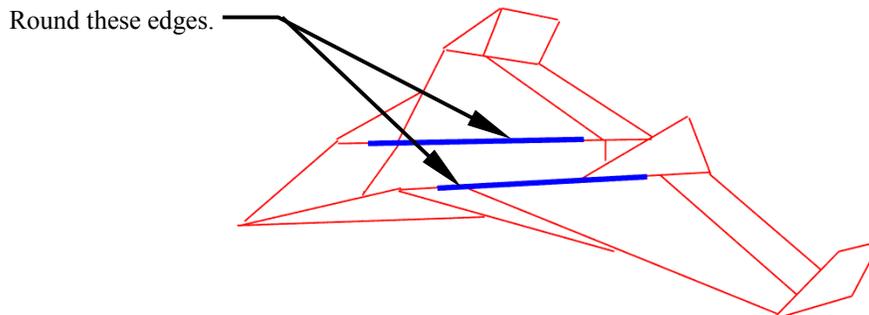


## Learning How to Trim a Plane

No matter how well we fold, we will most likely have to trim our plane. We will need to decide if we are going to tape our planes or leave them open. For many years, I hated the idea of having to use tape on a paper airplane. But, I finally realized that it did make better flying gliders. To keep it neat I prefer to use  $\frac{3}{4}$ " diameter color dot labels. However, if you want to fly in an official contest you must use regular scotch tape.

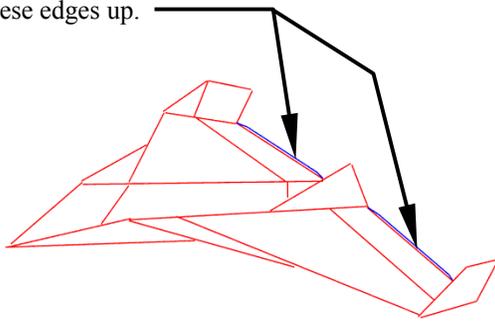


If you don't tape then you will have to smooth out some of the edges. Air does not like to flow over or across sharp corners. This can cause the plane to want to spin to one side or the other if you don't round the edges between the body and the wings as shown below.

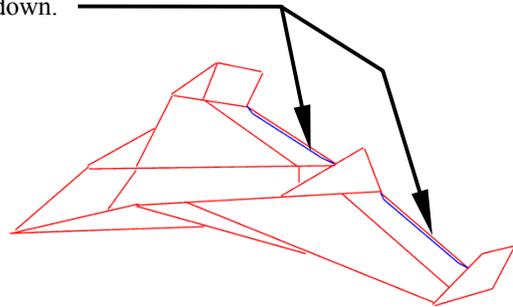


The next part to adjusting is to get straight and level flight. If the nose is going down or plane just doesn't have enough lift then curve back (trailing) edge of wing up as shown. If nose goes up then curve trailing edge down. For both of these adjustments, you may have to make curved edges and then straighten back as good as you can while leaving just a very slight adjustment.

If nose goes down then round these edges up.

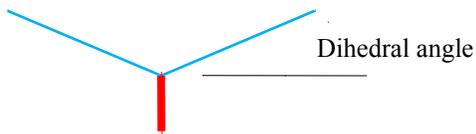


If nose goes up then round these edges down.



If the plane has a tendency to flip over and fly upside down, then try folding the fins to the opposite side, or add fins if there are none. Adding or removing the tail can become necessary when going from one type of paper to another. Adding a tail will bring the nose up and removing one will bring the nose down. If the plane spins out of control, then make sure that the wings are angled up, not down. This angle is called dihedral angle and is important for stability (helps prevent rolling).

Stable



Unstable

