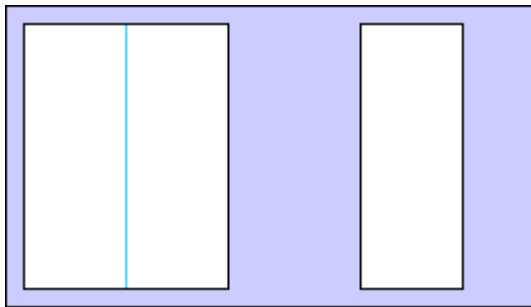


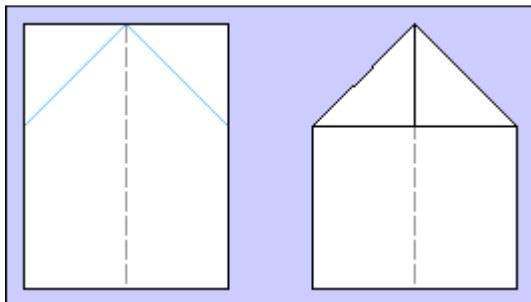
חוגי תעופה – הוראות בניה

PL4 - Hybrid למטוסי נייר דגם



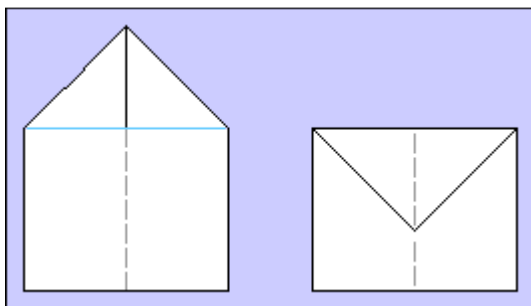
Step 1

Fold an 8 1/2 x 11 inch sheet of paper down the middle of the long dimension. Don't panic. Just look at the pictures. On the left I'll show you what you're starting with, and I'll mark (in blue) where you're going to fold. On the right you'll see what you should end up with after each step.



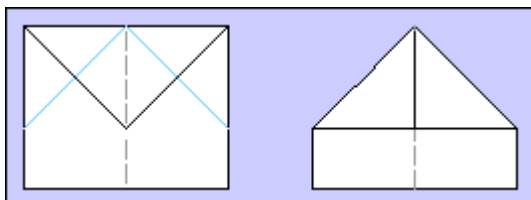
Step 2

Next fold the two upper corners in at a 45-degree angle. Be careful here to line these up, and do not let the flaps cross the middle of the paper. Use the middle fold as a guide.



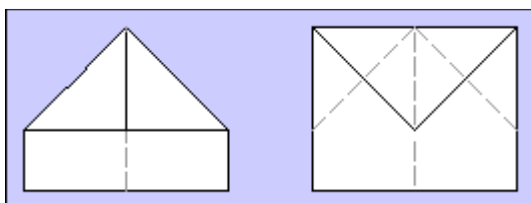
Step 3

Fold the upper point over and crease.



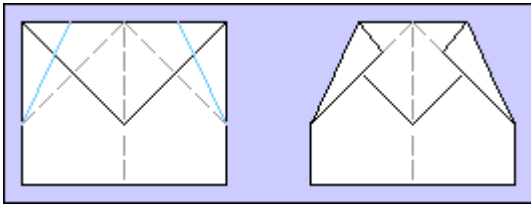
Step 4

Next fold the new upper corners in at a 45-degree angle. Be careful here to line these up, and do not let the flaps cross the middle of the paper. Use the middle fold as a guide.



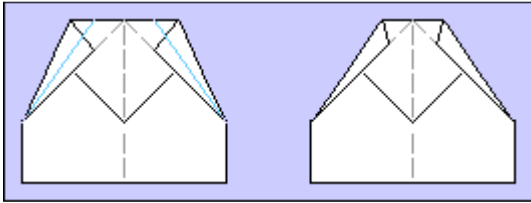
Step 5

Undo step 4. (We need the creases for the next step)



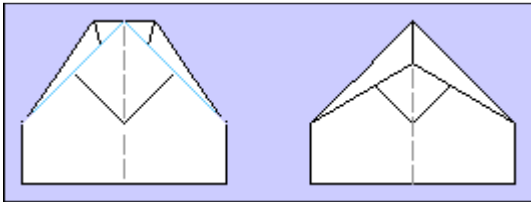
Step 6

Using those creases as a guide, fold the corners as shown. What we are doing is building up an airfoil at the leading edge of the wing.



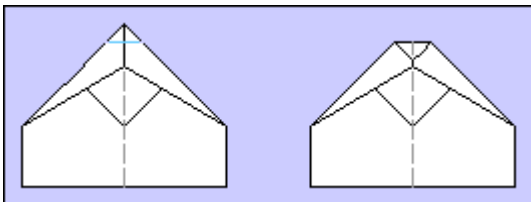
Step 7

Using the edge of paper as a guide, fold the corners again, as shown.



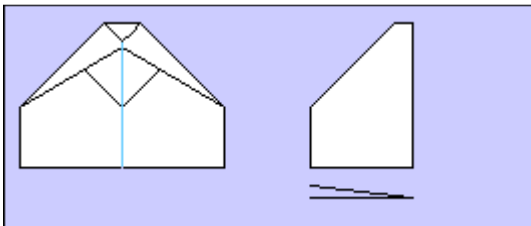
Step 8

Make the final fold for the wing leading edges.



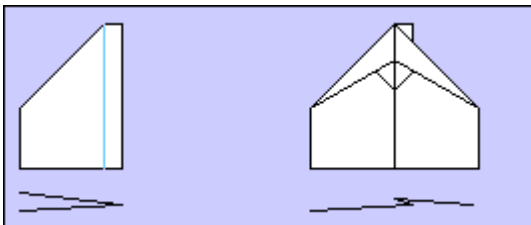
Step 9

Fold the tip over. Look closely at the drawing, don't fold too much, we just want to take the sharp edge off the nose.



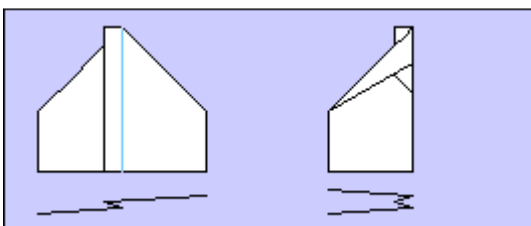
Step 10

Fold the plane in half. *The angled lines below the picture show what the plane would look like from the back.*



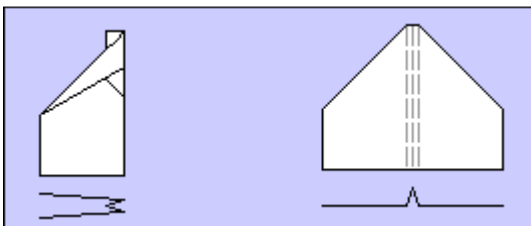
Step 11

Fold the wing over to form the fuselage. Make the body nice and even. (You can see that it's even if the trailing edge of the wings makes a nice straight line)



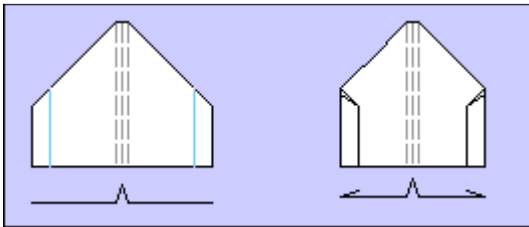
Step 12

Flip the plane over, and fold the other wing.



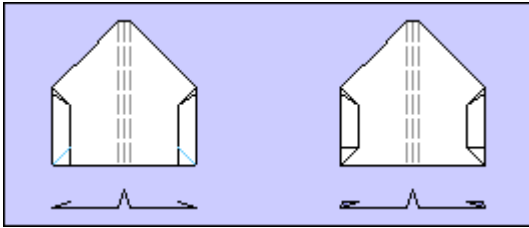
Step 13

Lay the plane out flat.



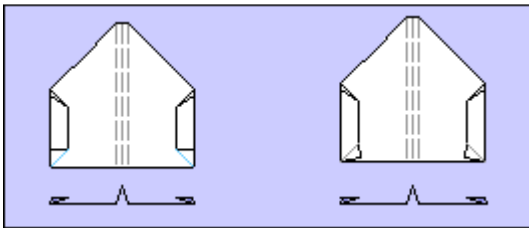
Step 14

Fold the winglets as shown. Make them about 3/4 of an inch (About 20 mm).



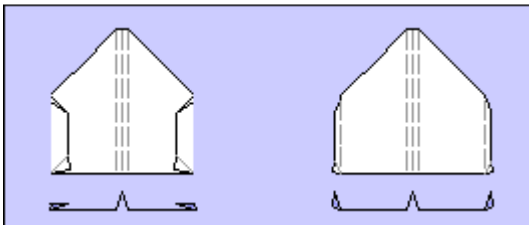
Step 15

(Optional) Fold the trailing edge of the winglets over to form small tabs. These tabs slow the plane down a little, but they also make it more stable, and you will get longer flights.



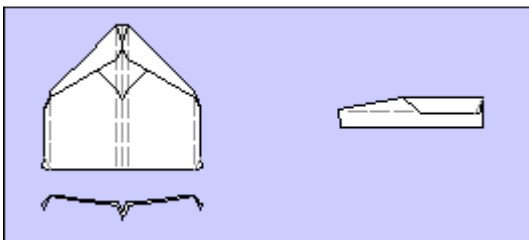
Step 16

(Optional - Part 2) Unfold the tabs and adjust to about a 30 degree angle. (You should make adjustments to these tabs based on test flights)



Step 17

Increase the winglets. Inspect their leading edges carefully, if they are twisted - - even a little -- the plane will not fly well.



Step 18

Flip it over, and shape the wings as shown. Now take it outside!