Even a perfectly folded plane needs a bit of fiddling to fly its best. The good news is that careful tweaking can get almost any plane in the air, perfect or not.

**I get a "rollercoaster" flight path**
Lower elevators or add down elevators.

**My plane barrel-rolls to the ground**
1. Make sure you have a V-shaped dihedral.
2. Check your plane for symmetry.
3. Add or change ailerons.

**My plane is dive-bombing**
1. Ease up on your throw.
2. Add up elevators.
The trick to tweaking your plane correctly is to identify, then fix, one problem at a time. For the first few throws of a newborn plane, go through a cycle of checking and fixing that looks something like this:

**Problem:** My plane's flight is unstable
1. Make sure your plane has a symmetrical design.
2. Add weights to your plane's wings.

**Solution**

**Problem:** It always turns in the same direction
1. Make sure your plane is symmetrical and fix any differences.
2. Raise the elevator on the wing opposite the direction you want your plane to turn.

**Solution**

**Problem:** My plane rolls over and flies upside-down

**Solution**
Yakamura Lock is easy to fold and plenty of fun! But the best part? Chances are, this will be the best-flying paper airplane you've ever made.
Fold in half lengthwise. Unfold to make a center crease.

Fold the upper-right corner down so the top edge sits on the center crease.

Do the same with the upper-left corner.
Fold the top point down, creasing right beneath the flaps you just made.

Put the upper-right corner on the center crease, about 1 inch (2.54 cm) above the point. Crease well.

Do the same with the upper-left corner.

Be precise in folding.
Fold in half. Make sure the edges of the left side line up perfectly with the edges on the right.

Flip over

Fold the other wing so that it sits right on top of the first one. Line up the edges with the wing you just made.

Almost finished

Unfold the wings part way so that your plane looks like the one from the back.

FLYING THE NAKAMURA LOCK
This classic paper plane flies best with a light, straight-ahead toss.
This is the best all-around paper airplane we've ever seen. It's easy to fold, durable and flies like a pro. With a little fussing, The Professional will fly like a glider, a part, even a stunt plane. When you need a paper plane absolutely, no-questions-asked ends in competition - you need the Professional.

1. Fold in half, top to bottom. Be exact.
Fold the right edge of the top flap up so it sits on the crease you just made.

Make the same fold with the left edge. The top half of the paper should look like an upside-down triangle.

Fold the upper-right corner down to the tip of the upside-down triangle.

Do the same with the upper-left corner.

Unfold the last two folds you made.

This is tricky, follow the drawings carefully.

Fold the right and left corners down to the creases you just unfolded.

Refold along the same creases.
8
Fold the point in the middle up.

9
Fold in half from left to right.

10
You'll need to put elevators in the professional's back wings. See page 9 to learn how.

11
Flip over
Good, solid straight-ahead throws are the professional's fuel of choice. But increase the elevator on the back edge and aim for the sky and you'll get big, arcing loops and corkscrews. If you want a slower glide, flatten out the fins. For dart-like flights, flatten the elevators and make sure the fins stick straight up.

**ALMOST FINISHED**

Unfold the wings so your plane looks like this from the back.

Make fins by folding a pinky-width of paper up on each side.

Fold the other wing right on top of the first. Line up all the edges carefully.

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**CHASE RACE**

For this game, you'll need a good 216, a straight-flying plane, and 3 couple ready-to-run legs. Have each racer make a plane that fits, straight, and far.

Then pick a starting line and a finish line at least a second field's length apart. Get everyone to line up on the starting line planes in hand. When somebody calls "Go," each racer moves his plane so far as he can toward the finish line, then runs after it.

The only two rules are:

1. No running with your plane.
2. Both you and your plane have to cross the finish line to win.

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**Game 2**

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The ultimate stunt plane! It's hard to throw badly, order to fold wrong, and almost impossible to get a flight out of it. If you only remember how to make one plane in this book, make this it!

Pick up this corner and put it near the X

Make a perfect diagonal crease. Then unfold it.

Do the same thing with the other corner. Fold...
5. Flip over

6. Bring the edges forward and together

Pull the top edge of the paper downward. As you do, the sides of the...
The Spy Plane flies higher and longer than most planes in this book. If you've got a big, open space and a healthy throwing arm, this is your plane.
Fold it in half lengthwise. Unfold to make a center crease.

TIP: Good folding = good flying!

Then, fold the bottom inch of the paper up, putting the center crease right on top of itself.

Put this crease exactly on the one underneath it. Do this for each fold.

Make the same fold six more times... until you get this.

7 Folds total
5

rotate

flip
over

6

end up

7

Fold the top flap back along the red line as shown.

8 flip
over

match the edges and press hard!
FLYING THE SPY PLANE

- Fly the Spy Plane straight up and as hard as you can. When it peaks out, its nose will flap over, and the plane will glide to the ground. The higher you get the Spy Plane before it starts gliding, the longer it will stay in the air.

- Partially unfold so that your plane looks like this from the back.

- Then put thumb-width fins in each wing. Fold them parallel to the body.