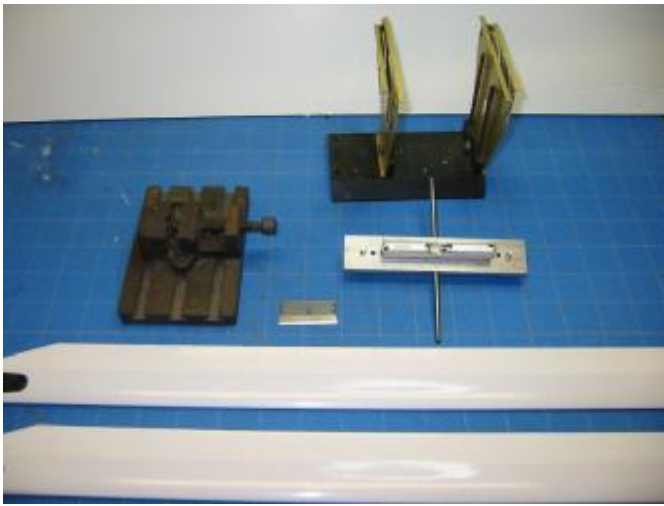


Balancing helicopter blades.

By [SeismicCWave](#) and [GonZo](#)

Things that I use:

- Single edge razor blade
- Small vice
- Blade balancer
- High point balancer



Steps to follow:

First put the single edge razor in the small vice with the edge facing up.



1. Put one blade on the razor's edge and move the blade back and forth until you find the balance point.



Push lightly and roll the blade on the razor's edge. This will put a cut mark on the blade.



Rotate the blade 45 degrees clockwise and find the balance point again. Push lightly and make another mark.

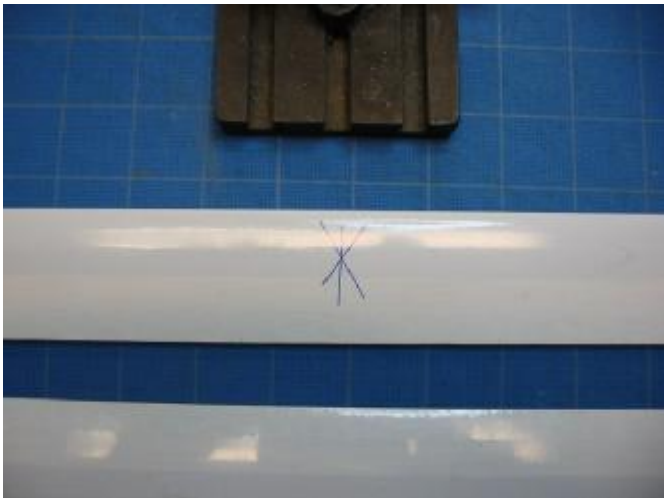


Now rotate the blade counter-clockwise 90 degrees so the blade is aligned 45 degree the other way on the razor. Find the balance point again

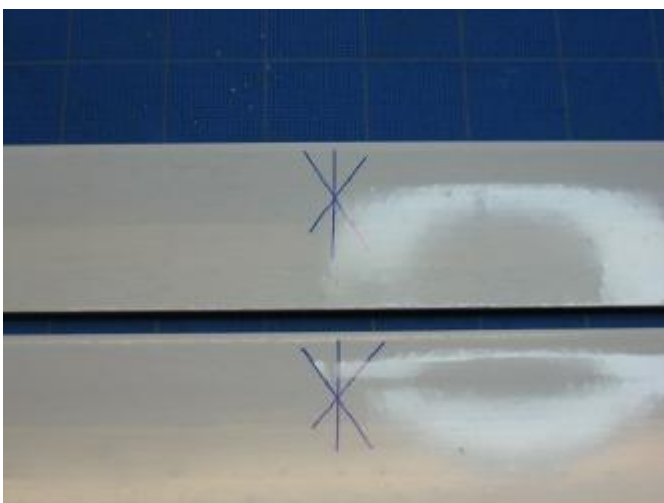
Push lightly and make one more mark.



Flip the blade over and you will see three lines. The lines should intersect each other at one point. This point is the span-wise and chord-wise CG of the blade.



Do the same to the other blade.

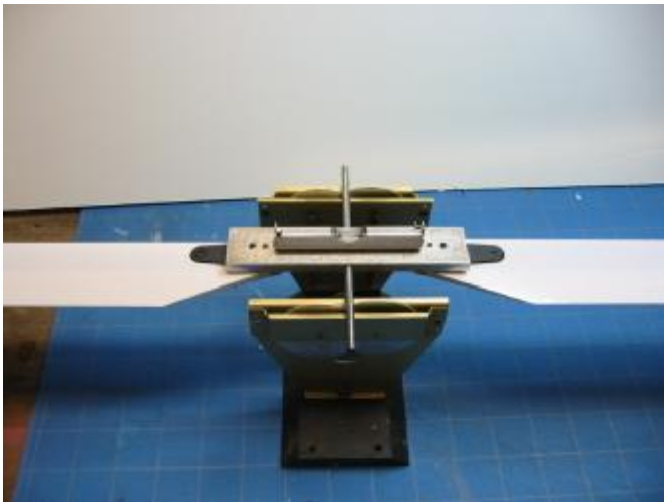


2. Put a screw through the hole of the blade attachment point. Put the blades one on top of each other.

Check the relative position of the CG points.
If the CG points are the same place on both blades you are lucky.
Chances are that they will not. One CG will be offset from the other.

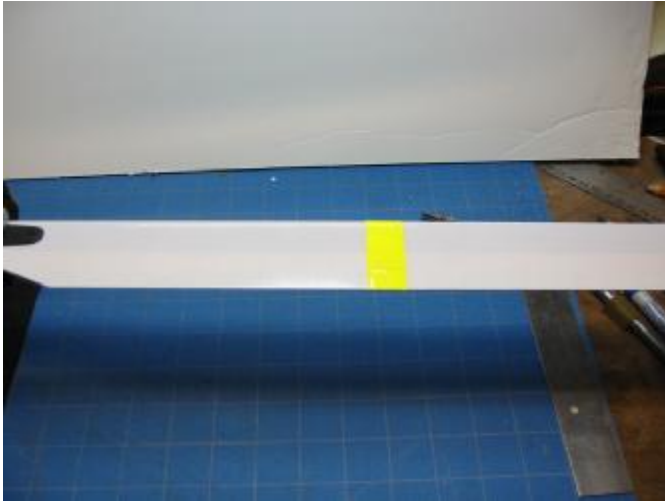


3. Bolt the blades up on the balancer.
Put the blades and the balancer on a High Point balancer or similar device.
If you don't have either two water glass will also work.
Find the lighter blade.



Take the blades off the balancer.
Put trim tape on the lighter blade to move the CG point to match the heavier blade.
If the lighter blade has a CG point closer to the root of the blade, put trim tape on the tip of the blade to move the CG point and vice versa.
Double check now again from point one (1) until both CG are in the same place.

4. Now bolt the blades back on the balancer and see which blade is lighter.
Put trim tape on the CG point of the lighter blade to make both blades the same weight.



5. To aid in tracking, put different color tape on the tip of the blade. Make sure you put the same length and width of trim material.



Now your blades are balanced and ready to go on the helicopter.

