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*Which Helicopter Blade Works Best: High or Low, Which is Slow?*

The purpose of this experiment was to see if a 17 degree angle helicopter blade or a 22 degree angle helicopter blade will work better in going upward faster. My hypothesis was that the 17 degree angle helicopter blade will work best. I was wondering if the commercial helicopter blade or the modified helicopter blade will work better in going upwards faster. To conduct this experiment I got one, 20 foot yard stick and put it straight up inside of a gym. I then held down the helicopter with yard sticks so that it didn't lift off before it got to full speed while my dad turned the throttle all the way up. Then we counted down to three and my dad filmed it and timed how long it took to get 20 feet up in the air. I tested each blade 3 times to get a good amount of trials.

The data that I collected did not support my hypothesis. From my test I figured out that the 22 degree angle helicopter blade did better than the 17 degree angle helicopter blade by 7 tenths of a second. I believe that the 22 degree angle helicopter blade did better because it may have pushed more air downwards but may need further testing in the forward, backward, and side to side motions.

These findings have lead me to believe that the 22 degree angle helicopter blade did better than the commercial 17 degree angle blade, but the remote control helicopter companies may use the 17 degree angle helicopter blade because of how well it does side to side, forwards, and backwards. If I were to test this experiment again I would test the forward, backwards, and side to side motions of the helicopter.