



**Prize Winner**

**Multimedia**

**Year 7-8**

**Cordelia Tonkin**

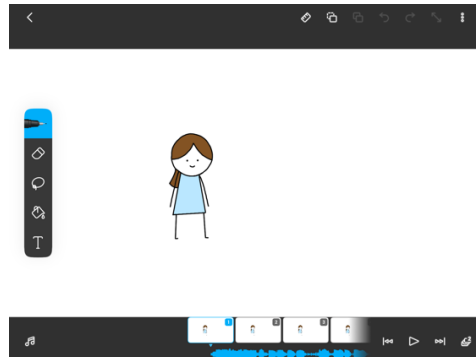
**Walford Anglican School for  
Girls**



## Oliphant Multimedia

### How a Model Airplane Works – Report

This entire animation was animated on an iPad on a free app called FlipaClip. Which I found in the app store.



### Discussion on problems:

There was only really one main problem I came across when making my animation. This was when I was writing the script. When I started writing about an aspect on how one of these rc / model airplanes work there was so much to write about, and I knew I couldn't fit it into 3 minutes. Some things I wanted to include are the electronics more in detail, thermals, and also really describe different wing types and what they do. Such as low wings, mid wings, and high wings. I could of talked about flaps. Different propellers, for example, three blade propellers vs two bladed propellers and which way the propeller had to be mounted on the motor to pull or push. Adding on this I wanted to say how some planes are pushers, meaning the propeller is at the back of wing and pushing it in the air. While there are also pullers which are more common which pull the plane. This is only to name a few things I wanted to add. So since I had a time limit I had to pluck out the most important parts of an airplane. To improve I should focus a specific part of an airplane and elaborate on that in detail.

When making the actual animation there was no technical problems and everything was animated on my iPad. I recorded my voice acting beforehand and put it into FlipaClip and then it was easy to animate in time with the audio. This animation consisted of 2700 frames and 15 frames per second (FPS).

### Help or Assistance:

During the production of this animation, I did not receive any help from anyone. This was done completely independently.

## Bibliography:

Rc-airplane-world.com. 2021. *How Airplanes Fly*. [online] Available at: <[https://www.rc-airplane-world.com/how-airplanes-fly.html#:~:text=Essentially%20there%20are%20a%20aerodynamic,and%20weight%20\(i.e.%20gravity\).&text=Drag%20is%20also%20a%20reaction,the%20wings%20of%20the%20airplane](https://www.rc-airplane-world.com/how-airplanes-fly.html#:~:text=Essentially%20there%20are%20a%20aerodynamic,and%20weight%20(i.e.%20gravity).&text=Drag%20is%20also%20a%20reaction,the%20wings%20of%20the%20airplane)> [Accessed 10 June 2021].

Instructables.com. 2021. [online] Available at: <<https://www.instructables.com/Beginners-Guide-to-Connecting-Your-RC-Plane-Electr/>> [Accessed 10 June 2021].

Stormthecastle.com. 2021. *Basics of how an RC Airplane works*. [online] Available at: <<http://www.stormthecastle.com/model-airplanes/basics-of-controls-of-an-rc-airplane.htm>> [Accessed 10 June 2021].

Grc.nasa.gov. 2021. *Forces on an Airplane*. [online] Available at: <<https://www.grc.nasa.gov/www/k-12/airplane/forces.html>> [Accessed 10 June 2021].

Boldmethod.com. 2021. *How Dihedral Keeps Your Wings Level*. [online] Available at: <<https://www.boldmethod.com/learn-to-fly/aerodynamics/dihedral-keeping-your-wings-level/>> [Accessed 10 June 2021].

Grc.nasa.gov. 2021. *Parts of Airplane*. [online] Available at: <<https://www.grc.nasa.gov/www/k-12/airplane/airplane.html>> [Accessed 10 June 2021].

Not a lot of research was needed because I already know a lot about rc airplanes. I like to build them in my spare time. I learned how to build and almost everything from a company called Flitetest. They have a YouTube Channel:

<https://www.youtube.com/channel/UC9zTuyWffK9ckEz1216noAw>

They make really fun videos and they show you how to build planes and them flying them . And they also have a shop in which I have bought and built many planes:

<https://www.flitetest.com/>