



# Mercury Bay Student Aviation Trust

## RV12 Project Log



Date	Hours	No. of students	Job reference
26 <sup>th</sup> August 2020	12:30-17:00	6	Engine Work and the Empennage Section



### Empennage and Wheel Work

We have been waiting for the trim tab to arrive back from the painters. Once that was completed, we have been able to place it on the tail section. This tab will help reduce forward/backward pressure on the control column. There was a problem with the wiring, where the trim tabs movement was back to front. We needed to check the Mercury Bay Aero Club's RV-12 to verify that what we had was correct or not. However, this is now being resolved as we did some rewiring to operate in the correct direction.

Today, Corbin had the task of placing the wheel fairings onto the front wheel of the plane. By doing this, the wheel will be protected by any damage and will allow more of an aerodynamic shape. They also look amazing in blue!

### Engine and Fuel

Corbin also put fuel in the tank which means we can now calibrate the unusable fuel. This is important to know, as when flying, the fuel can't be sucked out of the engine. This fuel is also included in the empty weight of the plane.

Emmanuel and Corbin attached a tube to the gasculator so when the fuel pump is turned on, the fuel can drain into a container. They can measure the amount of fuel (which ended up being 4 litres) in the container and time how long it takes to drain. This will determine how much unusable fuel there is left in the fuel tank and if the fuel pump is working correctly.

The engine required coolant which gets pumped around the engine to cool it down. Along with the engine work, the propeller was tracked to ensure that it was properly aligned.

**It has been an exciting time recently, as we are able to see the plane coming together which motivates us to continue the hard work.**







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