Test so far have shown the following; 29-10-14

Victor Yougov reported an increase in carbon build up, plus more wrist pin siezure.

Rob Fitzgerald reported:

With the 3mm venturi there is significant increase of carbon build up within the engine.
The engines have the ability to run a wide range of propeller sizes but it appears that smaller than current is required for stability in a race with the loss of the majority of noise reduction.
The most important thing we found was that with the current engine configuration with venturi change the fuel is less critical. We raced in a competition and did 3:11 with 2 pit stops using a standard fuel – oil, either, kerosene and DII only. This time would have just missed the semi cut off at the 2014 champs. I am quite confident that we can move to a standard fuel very soon. If we do this then it may not be necessary to reduce tank size. Maintaining stability whilst setting 50 laps in a race on standard fuel is quite difficult.

When we ran Yugov engines we always had pin problems, this is not new, the same as other users that I know of, always needing to clean the wrist pin as it picks up in the piston. I guess this change has tipped this design over the edge. I will suggest to him that he tests no TEL, we had to reduce compression 6-8 hours over leaded fuel which will help the load in this area. Other manufactures have piston boss problems with leaded fuel so removing it will help engine life for all competitors.

We tested Shell D60 against Jet A1 again. The engines produce carbon on D60 whereas before they didn't so this along with some other disadvantages I see no advantage in using it over A1. We need to look at the possibility of a synthetic oil to overcome the carbon and stick with A1. I will be looking into the different grades around the world and try to come up with a spec that is acceptable and available.

The speed of the models is now comfortable for pilots and easier to judge, if we can move to a standard fuel it will leave noise as the remaining specification issue to be addressed. I see the solution for this coming from our earlier tests on a model attachment with the exit pointing towards the centre.

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