

Scale Soaring UK

The forum for all your modelling requirements relating to scale gliders
<https://scalesoaring.co.uk/phpBB3/>

Cliff Charlesworth Oly 2b - Update

<https://scalesoaring.co.uk/phpBB3/viewtopic.php?f=12&t=677>

Re: Cliff Charlesworth Oly 2b - Update

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by **Peter Balcombe**

Posted: **23 Dec 2015, 14:17**

First brake complete and ready for installation so here are the final photos of the completed assembly.

The blades are finally sanded flush with the wing structure after installation so that capping is flush with wing skins when applied later.

The archived Oly build thread shows the brakes after installation in the wing.



Brakes nearly fully open



Brakes partially open

Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **21 Dec 2015, 14:15**

I have now started building another Oly brake set so can provide more detail of the assembly.

I use the brake arm/bearing tube assembly method detailed in Jilles Smits' Bocian design although this had brass arms and tubes. However, the assembly method also works with epoxied arm/tube bonds and ensures that everything is on common centres/radii.

The pictures below show two initial blade assemblies (not a pair) and the bonded set of arms/tubes, then a pair of blade assemblies together with 2 separated arms and brake box assembly, ready for final assembly.

Finally, a photo of the blades pinned to their arms ready to go into the box once the pins have been epoxied into position & then filed back nearly flush with the blade so that they do not catch on the box as the blade retracts.



Arm/tube assembly plus 1st blade pair



Brake components



Blades assembled to arms

Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **20 Dec 2015, 12:24**

Just noticed whilst building another set of these brakes that the main centre pivot spacing dimension is incorrectly marked on my sketch as 170mm whereas it should be 165mm as can be measured from the drawing.

This applies to both the brake blades sketch and the brake box side sketch.

I will rescan amended drawings and try to replace the ones attached to the previous post.

Drawings now amended in the earlier post and incorrect ones have been replaced with a Version 2 set

Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **10 Dec 2015, 15:27**

Lastly for now, I attach a pdf of the drawings/sketches I ended up with for my revised brake build.

Note that this better reflects the current Olympia 2B full size arrangement as discussed in the thread.

I will add photos of the brake assemblies once I make up the set for my current build.

Note that I have a zipped version of the 36 photos added in the previous few posts & can post that if wished.

Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **10 Dec 2015, 15:16**

This photo set are of the overall model and miscellaneous shots which didn't fit into the earlier sections (e.g. skid & MPX connector).

There are also about 8 photos which were posted by others, so I do not have these - I think all concerned with the canopy shape discussion.



Fuz readytoglass



Fuz with cloth



Oly structure



Part painted1



Part painted2



Wing MPX plug



Fuz 1side glassed



Skid built

Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **10 Dec 2015, 15:07**

Next set are related to the canopy base assembly and the revised canopy shape



Canopy lip former



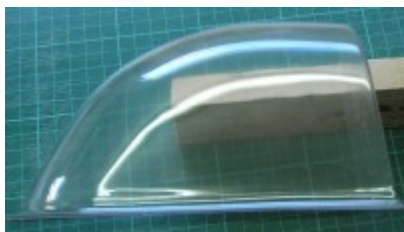
Canopy lip out former



Canopybase glassed



New canopy blank



Oly canopy blank



P2200001



P2200005



Canopy base lip

Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **10 Dec 2015, 15:01**

The next set are from the sections covering the wing build.



Aileron hinge



Aileron shrouds



Ailerons built



Left Wing built



LH Aileron with LE



LH Wing top skin1



LH Wing top skin2



RH Joiner box space



RH Joiner Box



RH Wing joiner fitted

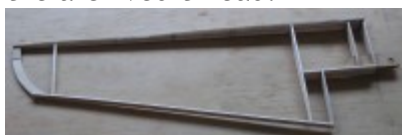
Re: Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **10 Dec 2015, 14:51**

First set of photos shows those missing from the build discussion of fin and tailplane areas.

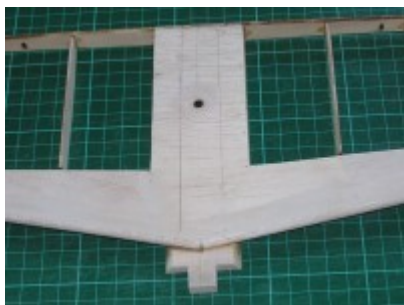
The titles under each photo are the same as those identified as the matching 'deleted' items in the archived thread.



Fin build side



Fin build



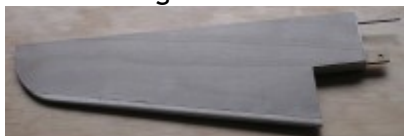
Lower tailplane fairing



New fin struct



Rudder hung



Skinned fin



Tailplane struct bottom



Tailplane struct top



Fin in place



Tailplane seat notch

Cliff Charlesworth Oly 2b - Update

by **Peter Balcombe**

Posted: **09 Dec 2015, 20:56**

This thread has been started as an update to that thankfully archived by Barry Cole before we lost the lot.

However, I have noticed that several dozen photos had already been lost (shown as deleted), so I will add these with a clue as to what they were called in the previous thread.

I also notice that the revised airbrake design (to represent actual 2b examples) was not really shown as a separate assembly, so will initially add my drawing/sketches and then photos of the brake build I am about to start for my current Oly build when I get that far.

As a starter for 10, I attach a photo of my Oly on takeoff, taken at the Woodspring aerotow held earlier this year.



Olympia under tow