

Scale Soaring UK

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

SLINGSBY TYPE 13 PETREL 1:3.5

<https://scalesoaring.co.uk/phpBB3/viewtopic.php?f=12&t=846>

Re: SLINGSBY TYPE 13 PETREL 1:3.5

Page 1 of 1

by **Ray_Eggleston**

Posted: **05 Sep 2016, 11:00**

Chris,

Great model and another great video. I like the way you have apparently coupled the pilots head with the models rudder.



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **Noël Rumers**

Posted: **05 Sep 2016, 00:20**

Very nice indeed!!!

Noël

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **Stuart Ward**

Posted: **02 Sep 2016, 20:47**

Thank you Chirs, for your efforts. She is a pretty glider
Stu

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **Phill Tadman**

Posted: **02 Sep 2016, 19:13**

Lovely!

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **02 Sep 2016, 17:46**

That concludes this thread, with a few pics and a video...

[youtube]

[/youtube]

IMG_1486 copy.jpg

IMG_1518 copy.jpg

P1170723 copy.jpg

P1260472 copy.jpg

IMG_1502 copy.jpg

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **24 Aug 2016, 17:18**

...





52.jpg

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **21 Aug 2016, 16:27**

...

47.jpg

48.jpg

49.jpg



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **19 Aug 2016, 23:10**

Just received these pics from Ken Howell, who has just successfully maiden'd his Petrel. Well done Ken!



petrel 3.jpg

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **18 Aug 2016, 11:03**

Strangely, I seem to have no pics of the aileron construction sequence, so I will use those from the Flamingo, which is very similar...

1st, the false aileron LE is made up and hinged to the wing with Robart hinges, and sanded flush. The dowel in the wing will support the hinge.



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **10 Aug 2016, 10:55**

The skid is made up from laminations of 1.5mm ply, and glued to an appropriate shape. Car heater hose makes up the rubber components.





Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **03 Aug 2016, 17:16**

chris williams wrote:

1.5-2 degrees would be just right. It's always best to set it up with an incidence checker. The throws on the plan should be fine: you can always adjust for taste afterwards. For fine pitch control around neutral, I have always found that using an inner hole on the servo arm that still gives enough movement is the way to go...

Thanks, Chris.

Richard

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **02 Aug 2016, 12:41**

1.5-2 degrees would be just right. It's always best to set it up with an incidence checker. The throws on the plan should be fine: you can always adjust for taste afterwards. For fine pitch control around neutral, I have always found that using an inner hole on the servo arm that still gives enough movement is the way to go...

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **01 Aug 2016, 17:04**

Hi Chris,

Measuring from your Petrel plans, I get about 2 - 3 degrees of wing incidence. Is this correct?

Also, are you still going with the control throws on your plans, or do you have any updated info for that as well? I got the tail control surfaces hinged and mounted, and just want to make sure there's enough movement.



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **01 Aug 2016, 10:32**

The canopy latch is made from an old Futaba servo arm. The peg is a length of 1.5mm threaded rod wound into the side of the fuselage, and is snipped off after fitting, leaving 3mm protruding. The canopy is trimmed off a bit at a time, using masking tape to pull it firmly into position...



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **27 Jul 2016, 09:00**

Just to reiterate: the canopy framework is built in place to ensure a good fit. The main corner

joints are reinforced by inserting fine piano wire via the services of a drill. The wire is pulled back slightly, cut off, and then tapped in flush with the framework...



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **22 Jul 2016, 12:47**

Continuing with the canopy framework... (BTW the photos are numerically sequenced in order by the camera. When you get an HTTP error and reload, the pic goes to the back of the queue, as in this instance. Perhaps the answer is load one pic at a time, duh)





Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **21 Jul 2016, 16:54**

Chris and others,

I'm curious about fillers. The two types that I see are two part polyester autobody filler, e.g. Bondo, and epoxy based filler, e.g. West 410. Can anyone comment as to the pros and cons of each? Bonding to wood? Weight? Strength? Dent/Impact resistance? Easy of application? Sanding?

Suggested alternatives to either I've mentioned?

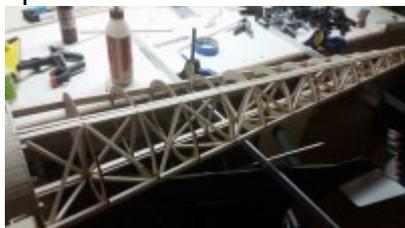
Richard

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **19 Jul 2016, 16:27**

Figuring out a reliable method to get the angles right on the braces from the bottom string to the side stringers required a lot of trial and error at first, but I got it down after about 10 screw ups and 5 successes.



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **17 Jul 2016, 20:17**

Richard, I use standard servos throughout, although these days I favour the Corona flat wing servos for the ailerons. I used JR591's for many years, although now I have reverted to Futaba 148's to allow the use of a 6v battery...

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **17 Jul 2016, 19:23**

Chris,

Can you recommend/share what size servos you are using for each control surface?

This is where I'm at with my build so far...

Thanks,

Richard



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **17 Jul 2016, 13:45**

The rails are slightly inset to allow for the thickness of the canopy material. Note the extra bracket to tie the nose cone to the rest of the fuselage...



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **13 Jul 2016, 13:28**

On to the canopy framework...the side rails are made up from 2 lams of 3x6mm Spruce, taped to the fuselage sides to make up the correct shape. The starboard rail is then hinged up prior to making up the rest of the framework...



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **07 Jul 2016, 20:31**

The secret with the filler is to run a blade through the wing/fuselage gaps whilst it has only partly gone off...





Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **06 Jul 2016, 22:36**

chris williams wrote:

The only thing to concentrate on during this process is to ensure that the ply facings remain a snug fit to the wing roots. The direction of the grain of the wood infilling is irrelevant. I should have mentioned that before the final stage of using filler, the balsa is sealed with super-thin cyano.

I started to place the joiner bars one above the other some years ago now, on the basis that it is constructionally more convenient. I doubt there's much difference in total bend resistance...

Thanks for the clarification Chris.

Steve, that sounds like an interesting configuration. I'll likely go with the stacked config.

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **06 Jul 2016, 22:05**

At White Sheet on Sunday, Steve defended his K8 from Ferdinand, a highly irritated bull, with a matador's panache and skill...Mind you, he was wearing a red T shirt 😊

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **RobbieB**

Posted: **06 Jul 2016, 21:25**

'El Stevo the Magnificent'

Are we in the presence of Greatness?

CW?

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **Steve Fraquet**

Posted: **06 Jul 2016, 19:40**

Hello iceman952, with reference to the wing joiners fortunately with the depth of the wing root on the Petrel it seems to lend itself to an over and under system. However when I built my Petrel many years ago I fitted my wing joiners side by side but I actually staggered the steels with about 8" and 5" in one wing and 5" and 8" in the other, ie 2 x 13" steel joiners. Hope this makes sense.

Enjoy the build

El Stevo the Magnificent (ask CW)

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **06 Jul 2016, 10:27**

The only thing to concentrate on during this process is to ensure that the ply facings remain a snug fit to the wing roots. The direction of the grain of the wood infilling is irrelevant. I should have mentioned that before the final stage of using filler, the balsa is sealed with super-thin cyano.

I started to place the joiner bars one above the other some years ago now, on the basis that it is constructionally more convenient. I doubt there's much difference in total bend resistance...

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **05 Jul 2016, 07:22**

Hi Chris,

So I'm trying to get a handle on your building technique. I'm still learning construction techniques, so please bear with my ignorance.

You start out tacking the wing root ribs to fuselage with some scraps of balsa...



Then fill in with a few additional balsa pieces with the grain running parallel to the wing direction.



Are there particular points you're aiming to glue these pieces to, or just looking for a good fit?



Finally, you fill with additional balsa pieces to make the volume between the wing root and fuse solid? Is there a reason you filled some parts with the grain parallel to the fuse and other part you filled parallel to the wing?



From the Petrel kit that Belair is selling they still have cut outs in the wing root ribs for the wing joiner blades in a configuration like " l l ". Why did you move to the stacked configuration that you're currently using for the wing joiner blades?

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **04 Jul 2016, 18:09**

Continuing... (A picture is worth a 1000 words!) You might notice that the pics are not in sequence. This is because the forum sometimes rejects individual files the 1st time around, then, when it accepts them, they are out of sequence...

Well CW, assuming your photo numbers are in sequence, you do this:-

1/



2/



3/



4/



So, I guess, your numbers are not in sequence.....

BC

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **29 Jun 2016, 12:57**

Lots of things to set up: decalage, angle of wings to fuselage in plan view, and wings level with tailplane (Remember, this is the version of the Petrel with the conventional tailplane)





Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **28 Jun 2016, 16:25**

Continuing the setting up of the wings... The trick is to set up the wings with the ply root facings flush to the wing roots, and to then fill in between the facings and the fuselage with balsa...



02030008.JPG

02030010.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **28 Jun 2016, 16:15**

The builds you have shown seem to have gone off-piste a little, but there are often several different ways of achieving the same thing. As far as structural strength is concerned, there is no need to make up a box and join it to F7.

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **28 Jun 2016, 15:29**

chris williams wrote:

Richard, the joiner boxes are entirely supported by the wing root fairings and need no other internal reinforcement...

Ok, the other builds I've been using as a guide have both had a support for the joiner boxes across F7.

1274968852.jpg

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **27 Jun 2016, 08:53**

Richard, the joiner boxes are entirely supported by the wing root fairings and need no other internal reinforcement...

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **27 Jun 2016, 05:55**

chris williams wrote:

Now for the tricky part...aligning up the wings to the fuselage. A centre line drawn through the top of the fuselage is enormously helpful...

Hi Chris,

Could you give a bit more detail on this aspect?

How are you mounting the wing joiners to the formers inside the fuse? I didn't see anything back on page 1 that showed any kind of mount on former 7 for the brass boxes.

Thanks,

Richard

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **25 Jun 2016, 12:37**

Now for the tricky part...aligning up the wings to the fuselage. A centre line drawn through the top of the fuselage is enormously helpful...

02030001.JPG

02030002 copy.jpg

02030003 copy.jpg

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **20 Jun 2016, 22:36**

Moving on with the spoilers...retro-dropping the 6mm sq spars into the wing is a doddle.

01300003.JPG



02010003.JPG



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by Noël Rumers

Posted: 16 Jun 2016, 09:01

Steve, you see, definitely no Belgian beer, Barry could not write after one of these at all!!!

Chris: "Scale or not to scale, that is the question!"

Time is the downside towards scale building, I think...and know...

Noël

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by chris williams

Posted: 15 Jun 2016, 21:52

Wing root and tip block completed, we now move on to the airbrakes...

01290001.JPG



01290004.JPG

**Re: SLINGSBY TYPE 13 PETREL 1:3.5**by **Barry_Cole**Posted: **15 Jun 2016, 21:20**

No drink. Just a touch screen.

Bc

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Barry_Cole**Posted: **15 Jun 2016, 14:56***chris williams wrote:*

It's not a 100% scale method, Noel, but the Scale Police haven't knocked on my door yet 😊

I have just given them your address. They will be round shortly. Be afraid, be very afraid....

BC

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **15 Jun 2016, 13:50**

It's not a 100% scale method, Noel, but the Scale Police haven't knocked on my door yet 😊

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Noël Rumers**Posted: **15 Jun 2016, 10:14**

Chris,

Never did want to build a gull wing due to the V-form...

Not too difficult in the end it looks.

I'm learning!

Noël

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **iceman952**Posted: **15 Jun 2016, 08:44**

Very nice. Thanks for sharing details of your work for those still learning how to build with wood. I can't say I recall seeing that in previous build threads. I'm still waiting for Gliders in Newark to ship the wing joiners that I ordered at the beginning of the month.

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **15 Jun 2016, 00:54**

The TE is made from 1.5mm Spruce sheet, laminated with 6mm balsa sheet. The rear of the ribs are laminated with 0.8mm ply to reinforce the joint between the ribs and the TE and to strengthen the rear of the ribs. When the cap strips are added, the balsa on the TE is sanded down to profile...

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **iceman952**

Posted: **15 Jun 2016, 00:30**

chris williams wrote:

More work on the inner wing panel...

You're adding 3/32 plywood pieces to the trailing edged to help strengthen the trailing edge?

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **12 Jun 2016, 12:42**

With the top sheeting clamped and taped in place, once the PVA has dried, it's time to sort out the wing root sheeting and rear locating tube...

01260006.JPG



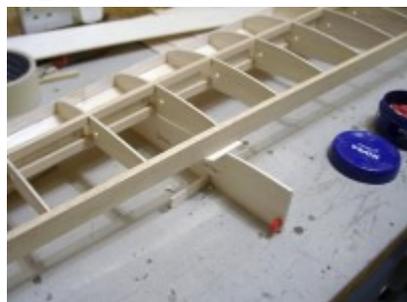
Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **10 Jun 2016, 12:43**

Time to sheet the wings...After glueing the lower sheeting with PVA, the wing is laid on top of its jiggging supports. The aileron spar is packed out with scrap 1/16" balsa to allow for the fact it's not yet sheeted. The Inner panel TE is supported to help to keep it straight. The 1/16" balsa sheeting is as hard as I can get it!

01260001.JPG

01260002.JPG

01260003.JPG

**Re: SLINGSBY TYPE 13 PETREL 1:3.5**by **chris williams**Posted: **08 Jun 2016, 17:26**

Quick sidestep now to look at the canopy. To accommodate the slight difference in profile on the Red Petrel, some extra filler is required. It's still the good 'ol Skylark 4 canopy, though...

01230001.JPG



01240004.JPG

01240005.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **02 Jun 2016, 17:12**

Continuing the gull-join and splicing the 1.5mm balsa sheet

01220008.JPG

01220014.JPG

01220016.JPG

01220017.JPG



01220019.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **27 May 2016, 10:57**

Continuing the gull-join...

01220004.JPG

01220005.JPG

01220006.JPG

01220007.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **18 May 2016, 00:46**

And the outer panels, plus marking up the spars ready for the gull join...

01210002.JPG

01220001.JPG

01220003.JPG

01220002.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Barry_Cole**Posted: **10 May 2016, 17:01***Tonyh wrote:*

f only the other one had been under 7Kg, we would not have splattered my Cub all over that nice French field.



There is some part of a foreign field that `s forever Barry`s :o :o :o :o
T.

The French have no sense of dignity, the Club moved, and the farmer ploughed up the field.

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **10 May 2016, 15:33**

More work on the inner wing panel...



01150011.JPG

01150012.JPG

01170001.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **05 May 2016, 22:06**

Dagnammit, I was going to say that...!

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Tonyh**Posted: **05 May 2016, 22:01**

f only the other one had been under 7Kg, we would not have splattered my Cub all over that nice French field.



There is some part of a foreign field that`s forever Barry`s :o :o :o :o
T.

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Barry_Cole**Posted: **05 May 2016, 16:55**

If only the other one had been under 7Kg, we would not have splattered my Cub all over that nice French field.



BC

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **05 May 2016, 16:24**

Of course, otherwise it might exceed 7Kgs 😊😊😊😊

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **john greenfield**Posted: **05 May 2016, 09:13**

"Outhouse rat"....well I have been called worse !!!

I assume you remove the screws after the glue has dried ?

AEB

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **04 May 2016, 13:25**

John, you must have eyes like an outhouse rat...! Small screws are often handy when you can't apply pressure any other way.

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Barry_Cole**Posted: **04 May 2016, 13:02**

Do I see small screws being used to hold the sheeting down on the main longerons before curving the sheeting round to the bottom stringer ?

Will that get him struck off.???



BC

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **john greenfield**Posted: **04 May 2016, 10:03****chris williams wrote:**

With the services all installed, the lower fuselage sheeting can be added. Note that not using individual panels between the formers, but instead lengths as long as possible, make for a much more arrival-proof structure. The scale panel joins can easily be simulated at the finishing stage...

Do I see small screws being used to hold the sheeting down on the main longerons before curving the sheeting round to the bottom stringer ?

AEB

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **04 May 2016, 09:55**

Basic wing construction commences...

01150004.JPG

01150005.JPG

01150007_001.JPG

01150006.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **22 Apr 2016, 16:12**

Time to move on the wings. The ribs were re-drawn in Compufoil for this new model, and the inaccuracy of the sandwich method cruelly revealed, although there seems to be little difference in performance! I have found the files for the new ribs and will make them available in the next post.

The wing joiners have been re-jigged, too, so that they are vertically aligned, although this was when the 14mm joiners were the only ones available...

01150004.JPG

01150001.JPG

**Re: SLINGSBY TYPE 13 PETREL 1:3.5**by **chris williams**Posted: **19 Apr 2016, 10:58**

With the services all installed, the lower fuselage sheeting can be added. Note that not using individual panels between the formers, but instead lengths as long as possible, make for a much more arrival-proof structure. The scale panel joints can easily be simulated at the finishing stage...



01060002.JPG

01060006.JPG



Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **16 Apr 2016, 00:59**

Continuing with the tail end...

01040005.JPG

01040006.JPG



01050004.jpg

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **13 Apr 2016, 16:20**

Continuing...

01040002.JPG

01040003.JPG

01040004.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **10 Apr 2016, 09:21**

The tailskid is finished off. Rudder assy commences...

01010008.JPG

01030001.JPG

01030002.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **07 Apr 2016, 23:10**

More work on the rear end...

01010001.JPG

01010002.JPG

01010003.JPG

01010007.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **04 Apr 2016, 23:37**

'Fraid not, Stuart...that was way back in the last century! However, the Rhoadler has the same DNA as the Petrel:

06.JPG

07.JPG

08.JPG

09.JPG

10.JPG

11.JPG

11.JPG

05.JPG

12.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **Stuart Ward**Posted: **04 Apr 2016, 22:30**

Do you have any photos showing the AMT Chris?

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **03 Apr 2016, 15:47**

With the half-shell method of fuselage construction, you need to keep checking that the fuselage is not twisted.

P1020910.JPG

12300002.JPG

12300003.JPG

P1020908.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5by **chris williams**Posted: **02 Apr 2016, 20:10**

More work on the rear end...Note wooden pushrod and rudder cable guides as well as the elevator actuating mechanism

12300012.JPG

P1000381.JPG

P1000382.JPG

P1000383.JPG
P1000384.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **01 Apr 2016, 23:08**

Continuing...
12290010.JPG
12290006.JPG
12290007.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **30 Mar 2016, 13:46**

Tailplane time...
12280008.JPG
12290001.JPG
12290002.JPG
12290004.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **29 Mar 2016, 13:52**

Time to add the turtle deck to the rear. Note that the subtle curve behind the canopy needs a separate panel
12270003.JPG
12270004.JPG
12280007.JPG
12280001.JPG
12280006.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **28 Mar 2016, 12:52**

Finishing off the front planking. Once the planks are tied together internally with some fine cloth and resin, the temporary formers can be removed and the interior glassed. (Polyester resin in this case)
12250001.JPG
12260001.JPG
12260002.JPG
12270001.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **Stuart Ward**

Posted: **28 Mar 2016, 02:53**

My Petrel plan has been ordered

Stu

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **27 Mar 2016, 12:31**

Continuing to make up the second side...
12230006.JPG

12230008.JPG
12230009.JPG
12230012.JPG
12240008.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **26 Mar 2016, 13:11**

Adding the 1.5mm ply planking. Once enough of a compound curve has been achieved, the front of the fuselage will retain its shape when removed from the board... These days, I stagger the joint between the 1.5mm and 0.8mm ply for extra hill resistance. It's the lower planking that is extended.

The easiest way to do the planking is to cut out one piece of ply, three planks wide, score the plank lines and crack some curve into the wood with a pair of pliers. This way you can apply three planks at a time. The fit does not have to be perfect, as the interior will be glassed, and exterior smoothed out with filler...(The result is a very strong and ding-proof fuselage)

Important: leave the planks protruding a little at the front to allow the nose cone a good grip...

12230003.JPG
12230004.JPG
12230005.JPG
12230006.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **24 Mar 2016, 16:48**

The fuselage starts here...

12220001.JPG
12220002.JPG
12220004.JPG
12220005.JPG
12220006.JPG

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **24 Mar 2016, 14:51**

More recap...the canopy on the plan version, the one with the AMT, is built up from several flat plates of PETG, as per the full size. The red version has a blown canopy with fake frames, and this can be replicated on the model using my Skylark 4 canopy.

Re: SLINGSBY TYPE 13 PETREL 1:3.5

by **Stuart Ward**

Posted: **24 Mar 2016, 00:47**

This will be greatly appreciated by many on this forum

I will be following closely and with interest.

Stu

SLINGSBY TYPE 13 PETREL 1:3.5

by **chris williams**

Posted: **24 Mar 2016, 00:17**

I've had a request for another build thread for my current Petrel, the old one having fallen off the van during the forum change...

Just to recap: there are only two full-size Petrels in existence: one has an AMT, which is the one the plan is based on, and one (the red one) has a modified conventional tailplane, which is my current version. I have re-drawn the tail arrangements and also properly plotted the wing ribs

(e-mail if you want these) . These drawings are available from the main website here:

[http://www.scalesoaring.co.uk/VINTAGE/P ... 202012.zip](http://www.scalesoaring.co.uk/VINTAGE/P...202012.zip)

Untitled-1.jpg

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