

Discussing some issues with some ARF hinges



How do you go from this?



To this?

Note: The ailerons are missing.

Experience tells me that planes fly poorly without the ailerons. One or two.



This tiny hinge is only one of three holding a 12x3" aileron to an 80" ARF.

Note almost no glue or adhesion on the hinge to the foam wing.



This is an example of a Robart style hinge shown beside what was in the ARF. Multiple times larger and more area for glue to hold.



Alternate strip type hinge with even more holding power. Note any time you install new Robart type hinges or this strip type, I recommend 30 minute epoxy glue and a liberal coating of Vaseline at the actual joint to prevent the epoxy or any glue from locking the hinge joint.

Note, this strip type is $\frac{3}{4}$ " wide. 1' and $\frac{1}{2}$ are available. If you want even more holding power, particularly if the hinge is being installed in wood, drill through the hinge after installation and install a wood screw.

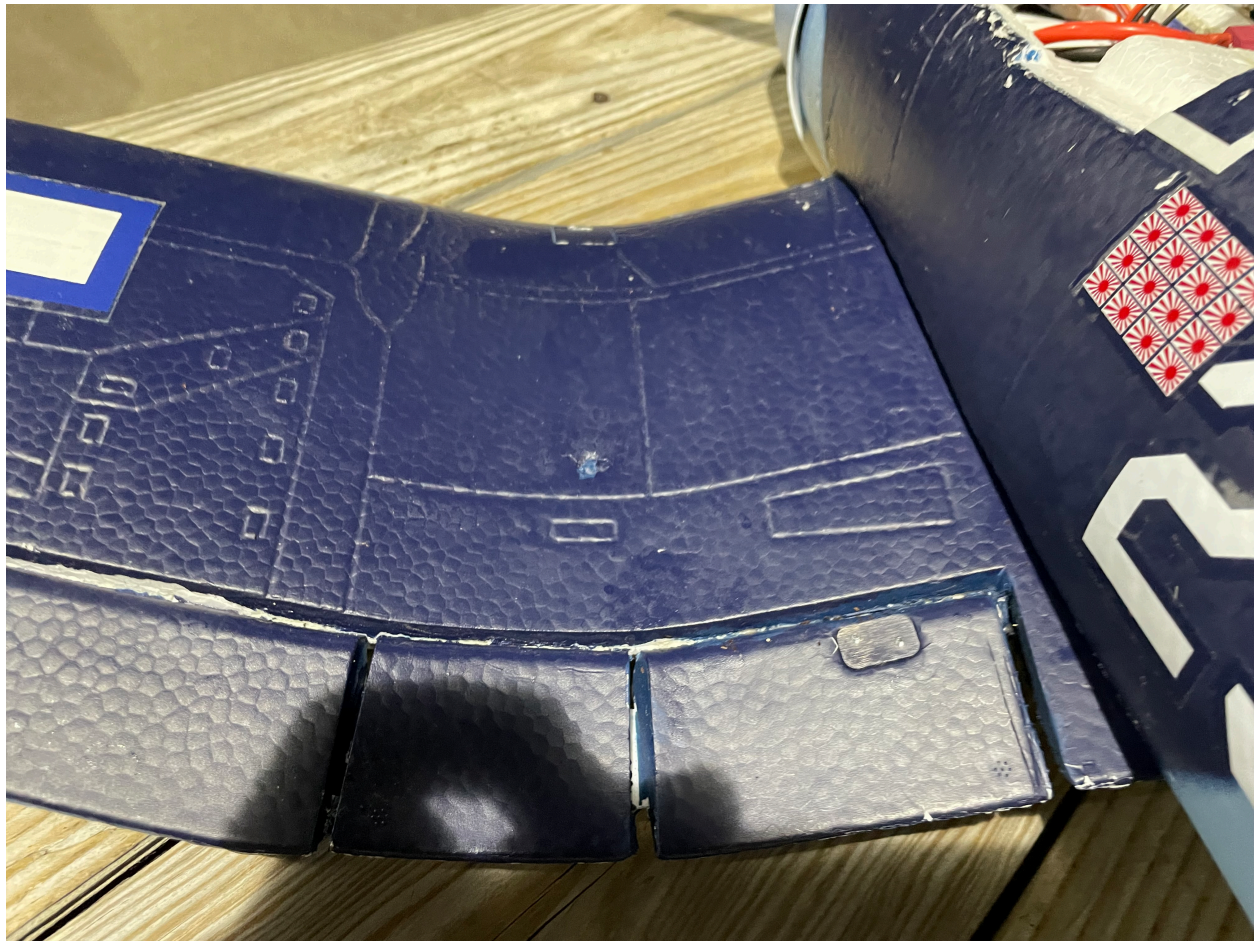
This is also recommended for using the hinge under a control horn or the bottom hinge of a rudder.

FOAM HINGES



Many new foam planes do not have ANY HINGES. They use a narrowed down section of the main foam, perhaps 1/8" thick, at the control surface joint.

This WILL FAIL due to material fatigue.



As the joint begins to fail, you will see more and more different color at the control surface to wing joint. Soon it will begin to tear. If not inspected with will fail.



This is an example of a failed aileron joint on a glider.....I PULLED FROM THE TRASH can. It is not a matter of "IF", but "WHEN" this will happen. So carefully inspect or pull on these joints regularly.

Recommended repair of a foam joint

DO NOT TRY TO “GLUE” the joint back together, it will be too stiff and will fail.

1. One way, that I do not recommend, is to simply fold the joint and install packing tape on each side of the joint. It will loosen.
2. Use the above Robart style hinges with Epoxy, all the length of the joint.



You can see the joint previously failed and ripped apart. This is a permanent fix.

3. Use strip hinges as previously mentioned with 30 minute epoxy glue. Larger is better. Again, always coat the hinge joint with Vaseline to prevent the glue from locking the joint. Wipe away any excess glue.

Good Luck

Twinman of BCF RC Club.