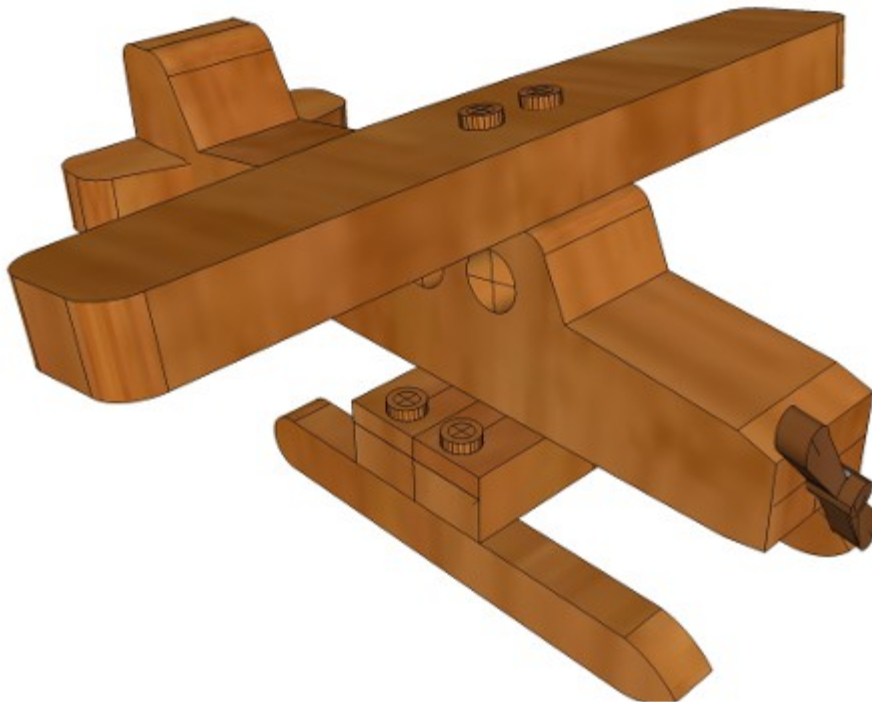


WWCH April 2023 Toy of the Month



Seaplane v2



Instructions

Please remember to work safely.

This Seaplane v2 design was inspired by Bill Hoffmeister. I refined this design to make a somewhat sturdier, simpler plane.

This is one way to make the Seaplane v2. You may have to adapt to the tooling you have available to you. Always use the tools and procedures that make the most sense to you.

Fuselage

1. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use.
2. Need a stock of 10" long, by 1" wide, by 3/4" thick.
3. See the WWCH Seaplane v2 Fuselage Profile View to see how to cut the pattern for the fuselage template. You'll need a 5/8" Forstner bit for the window.
4. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane v2.
5. Cut the actual Seaplane v2 Fuselage out of 2X4 or equivalent stock using the template as a guide.
6. Drill the 5/8" DIA hole using a Forstner bit.
7. Drill the 7/32" DIA hole for the propeller at the front of the fuselage.
8. Sand to the lines.
9. Round the edges with a sander or round over bit. Up to a 1/4 radius round over bit can be used for this step.

Wing

1. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use.
2. Need a stock of 11" long, by 2" wide, by 3/4" thick.
3. See the WWCH Seaplane v2 Half Wing Profile and Side Views to see how to cut the pattern for the Wing template. You need to copy the plan on either side to make the complete 10 1/2" Wing section.
4. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane v2 Wing.
5. Cut the actual Seaplane v2 Wing out of 3/4" stock.
6. Sand to the lines.
7. Round the edges with a sander or round over bit. Up to a 1/4 radius round over bit can be used for this step.

Base

1. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use
2. Need a stock 3.5" long, by 2" wide, by 3/4" thick.

Instructions (continued)

Elevator

1. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use.
2. Need a stock of 4" long, by 1-1/2" wide, by 3/4" thick.
3. See the WWCH Seaplane v2 Propeller Profile View to see how to cut the pattern for the Elevator template.
4. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane v2 Elevator.
5. Cut the actual Seaplane v2 Elevator out of 3/4" stock.
6. Sand to the lines.
7. Round the edges with a sander or round over bit. Up to a 1/4 radius round over bit can be used for this step.

Pontoons

1. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use
2. Need a stock 5" long, by 1" wide, by 3/4" thick.

Propeller

1. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use.
2. Need a stock of 3" long, by 1" wide, by 3/4" thick.
3. See the WWCH Seaplane v2 Propeller Profile View to see how to cut the pattern for the Wing template.
4. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane v2 Propeller.
5. Cut the actual Seaplane v2 Propeller out of 3/4" stock.
6. Drill a 1/4" DIA hole to take the 7/32" DIA axle that will be attached to the Fuselage (see Assembly section).
7. Sand to the lines.
8. Round the edges with a sander or round over bit. Up to a 1/4 radius round over bit can be used for this step.

Instructions (continued)

Assembly

1. Attach the base with axles at the designated point on either side of the Fuselage at the designated point. A hammer should do the job.
2. Attach the pontoons to the base with axles.
3. Attach the Wing to the top of the Fuselage with axles, centered along center line across the length of the Fuselage (see cover photo and cover wire-frame drawing for example).
4. Drill a 7/32" DIA hole in the front of the Fuselage, centered to take the axle for the Propeller. You may need to add a bit of CA glue to the axle end to make sure the Propeller axle stays fixed in the Fuselage (and the Propeller is free to rotate). Thread the axle through the Propeller and attach to the Fuselage. If done correctly, the Propeller should be attached and free to rotate.

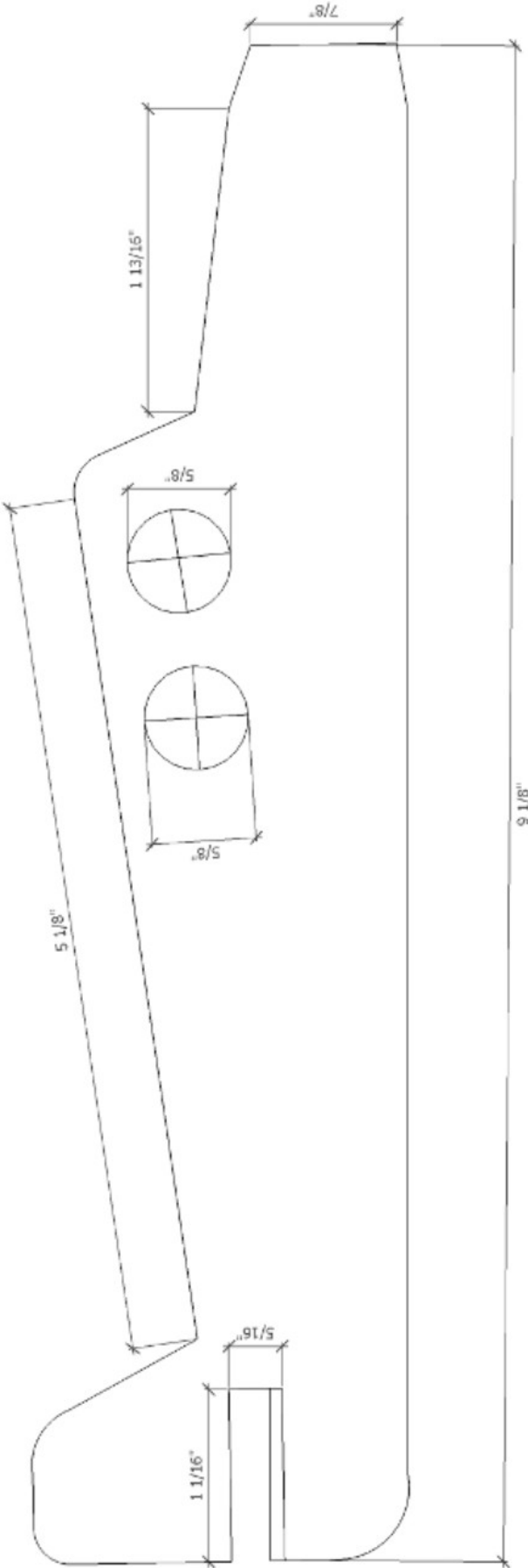
Finish

1. Use beeswax or leave unfinished to allow for even more creativity by the child to paint as desired.

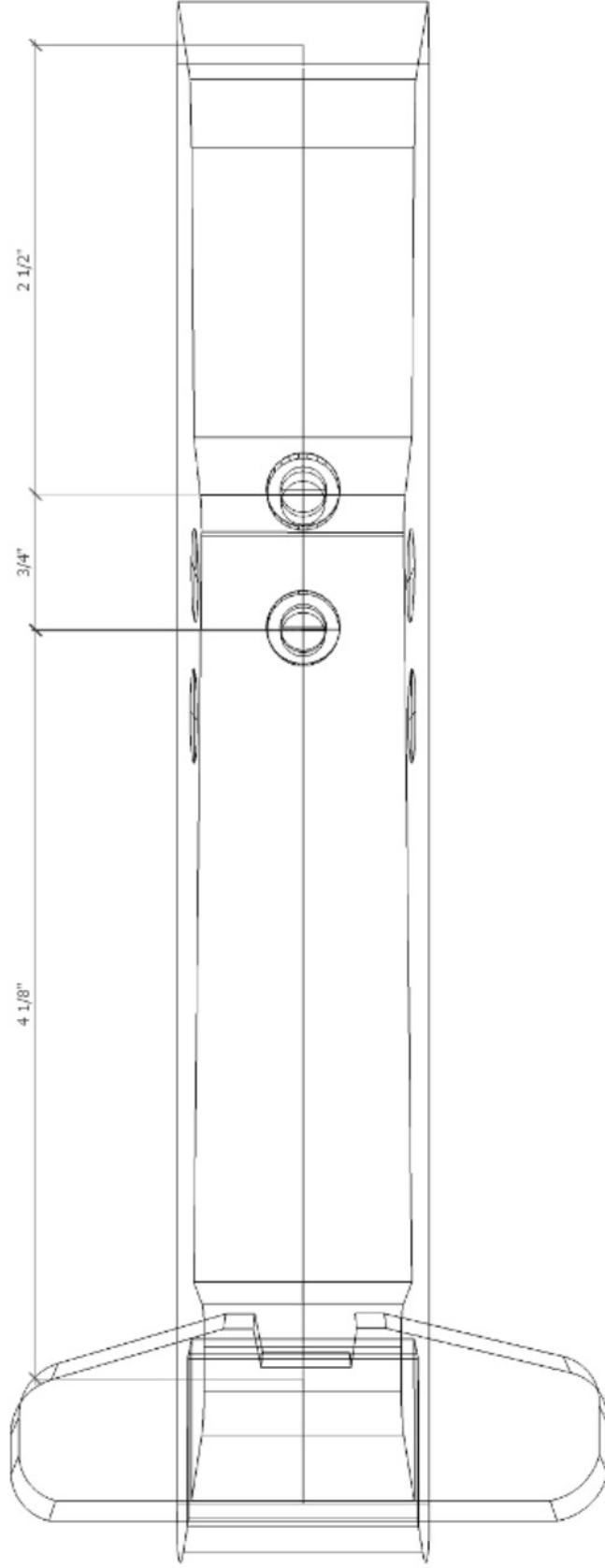
Conclusion

We at the Toy Group of the WWCH would like to thank you for participating in our toy making charitable activity. These toys will bring smiles to the less privileged children of our area.

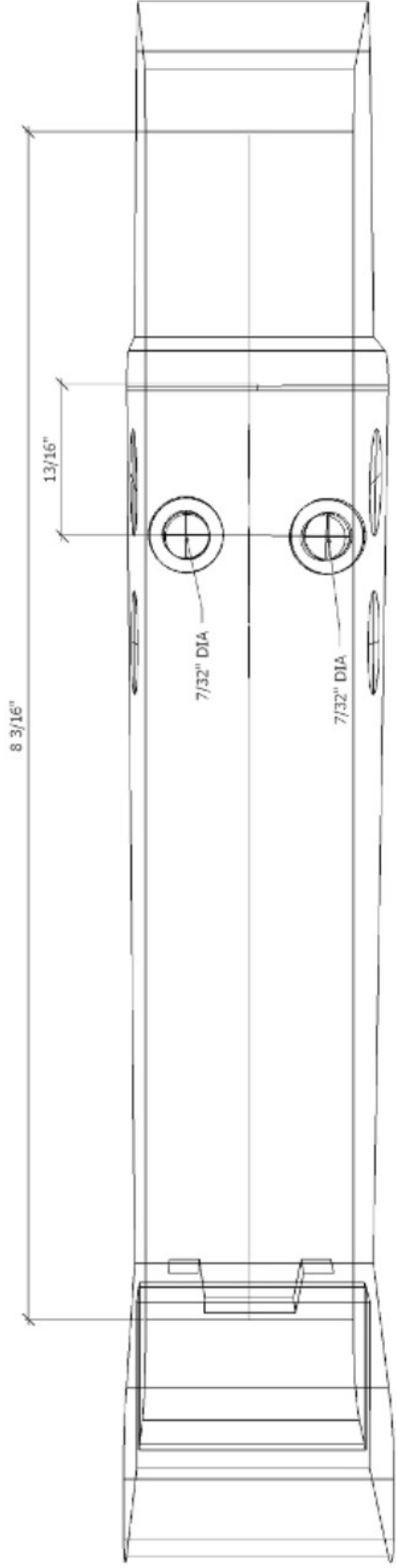
WWCH Seaplane v2 Fuselage – Profile View – To Scale



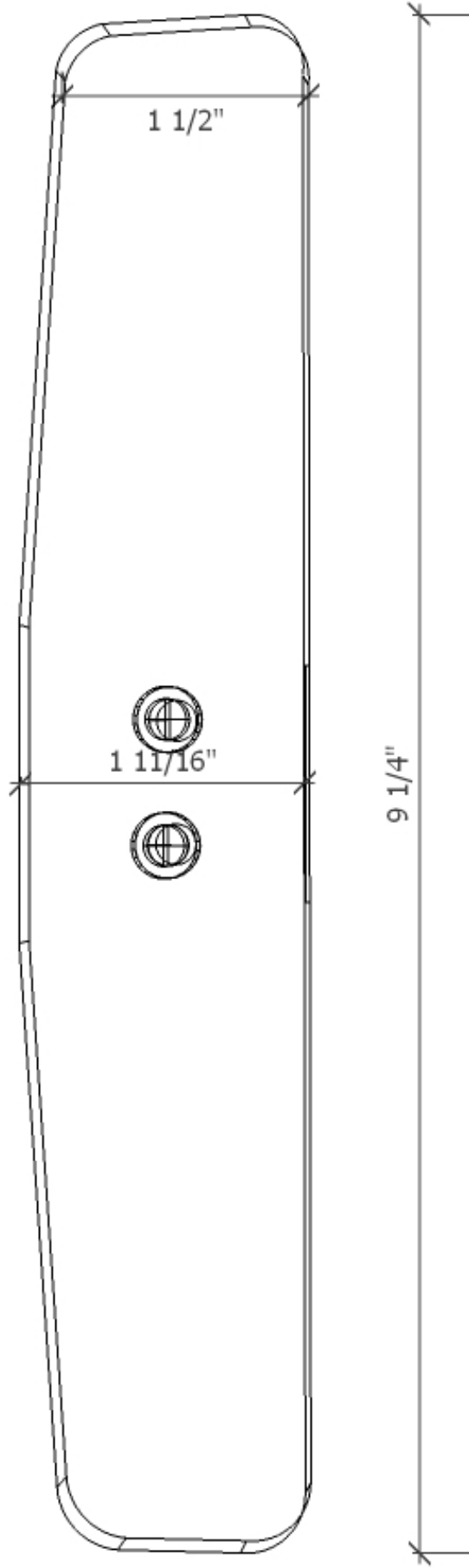
WWCH Seaplane v2 Bottom Fuselage – To Scale



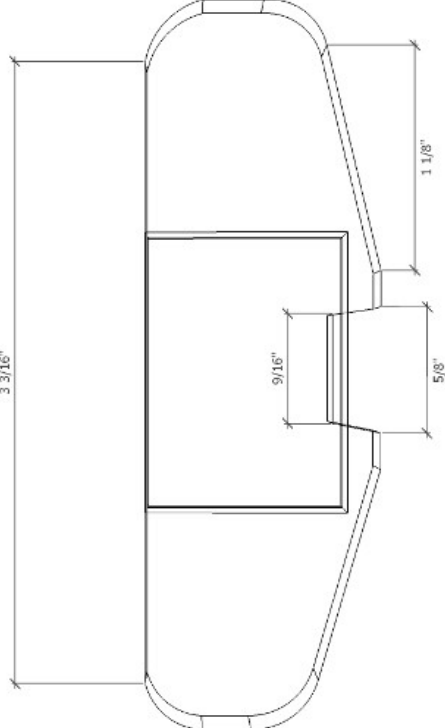
WWCH Seaplane v2 Top Fuselage – To Scale



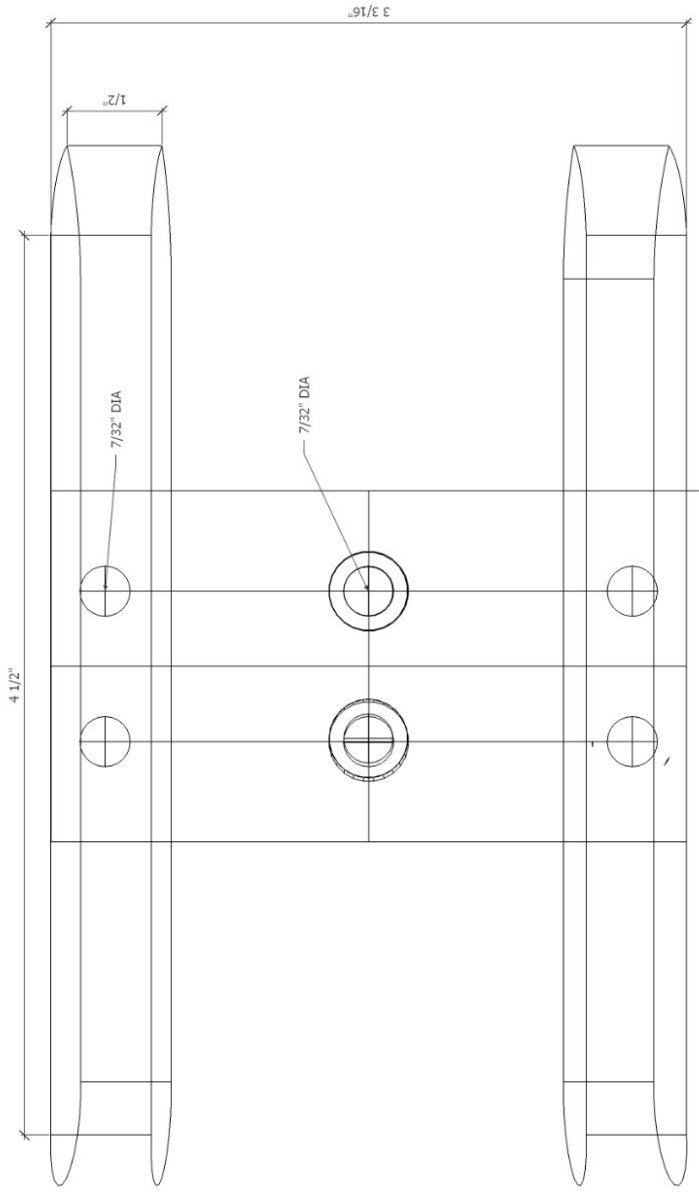
WWCH Seaplane v2 Top Wing – To Scale – 1/2" thick



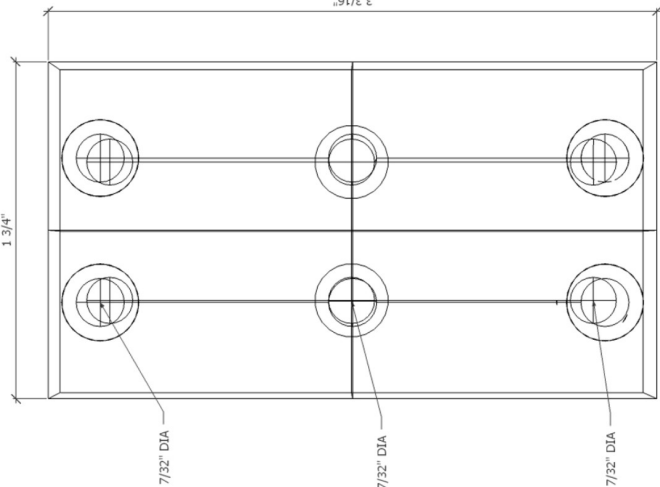
WWCH Seaplane v2 Top Elevator – To Scale



WWCH Seaplane v2 Top pontoons and Base – To Scale



WWCH Seaplane v2 Top Base – To Scale



WWCH Seaplane v2 Propeller Views – To Scale
Note that the Propeller is 1/2" thick.

