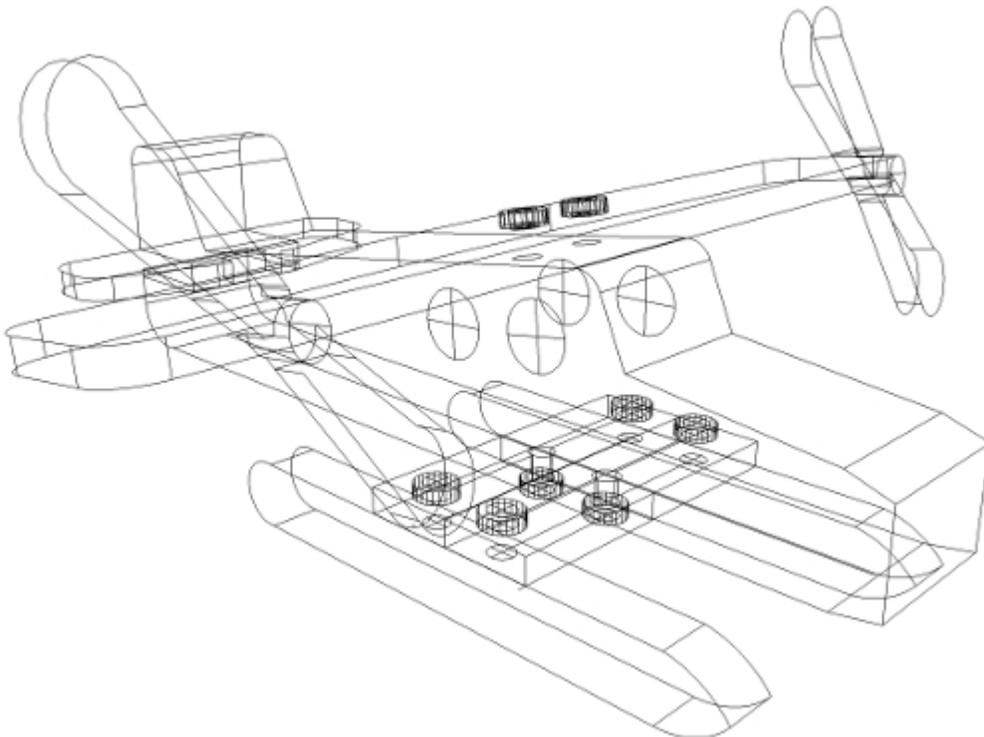


WWCH May 2020 Toy of the Month



Seaplane



Instructions

Please remember to work safely.

This is one way to make the Seaplane. 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 2 1/4" wide, by 1 1/2" thick. It's designed to be made from a 2X4, but any sizable piece of stock will do.
3. See the WWCH Seaplane Fuselage Profile View to see how to cut the pattern for the fuselage template. You'll need a 5/8" Forstner bit for the windows.
4. See the WWCH Seaplane Fuselage Top View to see where to drill the holes to accept the Wing.
5. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane.
6. Cut the actual Seaplane Fuselage out of 2X4 or equivalent stock using the template as a guide.
7. Drill the 5/8" DIA holes using a Forstner bit.
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 9" long, by 2" wide, by 3/4" thick.
3. See the WWCH Seaplane Top Wing 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 Wing.
5. Cut the actual Seaplane 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.

Instructions (continued)

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 4 1/2" long, by 1" wide, by 3/4" thick.
3. See the WWCH Seaplane Top Wing View to where the Propeller Entry points are (roughly 3/4" from either end of the Wing) on the Wing. Make sure to center the Propeller in the 3/4" thickness.
4. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane Propeller.
5. Cut the actual Seaplane 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.

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. Need a stock of 6" long, by 3/4" wide, by 3/4" thick.
2. See the WWCH Seaplane Pontoons and Base to see how to cut the Pontoons exactly. You'll want to taper them off at a 45 degree angle from center on either end to look like the wireframe design on the front page. Also, you can see where the Pontoons are attached to the Base Frame and where the Base Frame is attached to the Fuselage.
3. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane Propeller.

Base Frame

4. Make a template from the attached full size pattern. 1/8" scrap or old file folders are a couple of materials you could use.
5. Need a stock of 3 1/2" long, by 2" wide, by 3/4" thick.
6. See the WWCH Seaplane Base to see how to cut the Base Frame exactly. See where to drill the 7/32" DIA holes to accept the axle component parts.
7. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane Propeller.

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 1/4" wide, by 1/4" thick.
3. See the WWCH Seaplane Top Elevator to see how to cut the Elevator exactly. See where to drill the 7/32" DIA holes to accept the axle component parts. I'm using a scroll saw. Use this or a band saw to cut just outside the template pattern lines for the Seaplane Propeller.

Assembly

1. Drill the holes through the Wing and into the Fuselage at the designated points.
2. Drill the holes through the Wing and into the Propeller at the designated points. Attach the Propeller to the Wing at the designate points with Axle components.
3. Drill the holes through the Base Frame and Pontoons at the designated points. Attach the Pontoons to the Base Frame with the 7/32" Axle components.
4. Drill the holes through the Base Frame and into the base of the Fuselage. Attach the Base Frame (now with Pontoons attached) to the Fuselage at the designated points with Axle components.
5. Attach the Wing (now with Propellers attached) at the top of the Fuselage at the designated points with Axle components.
6. Hammer in (or glue if necessary) the Elevator to the tail of the Fuselage.

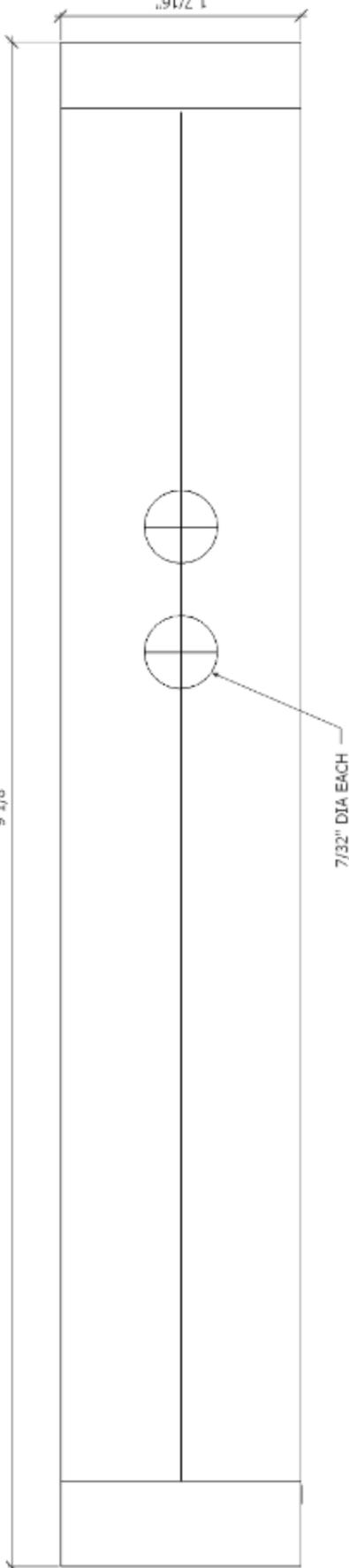
Finish

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

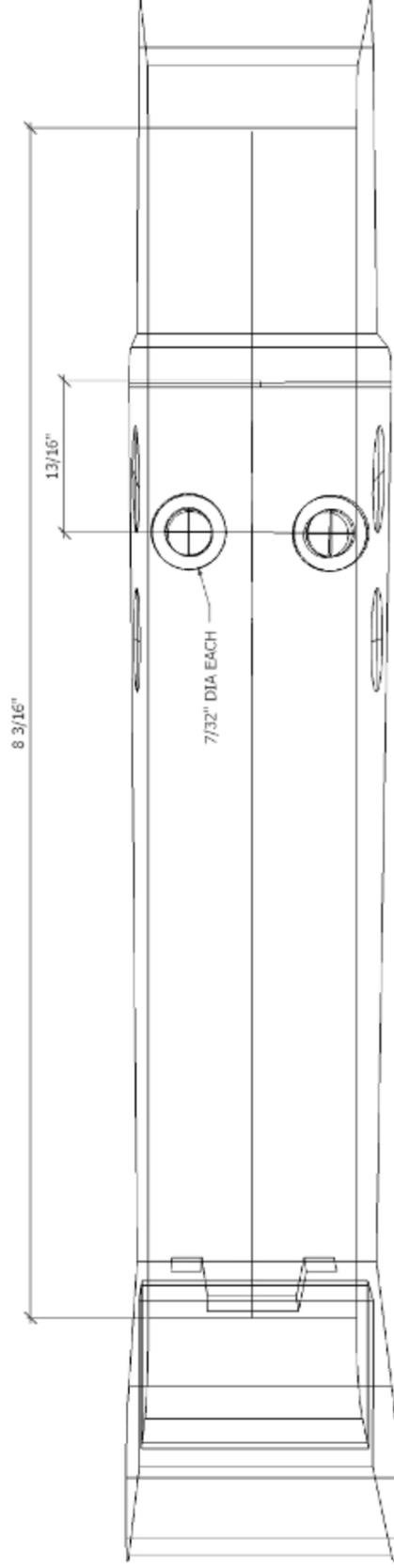
Conclusion

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.

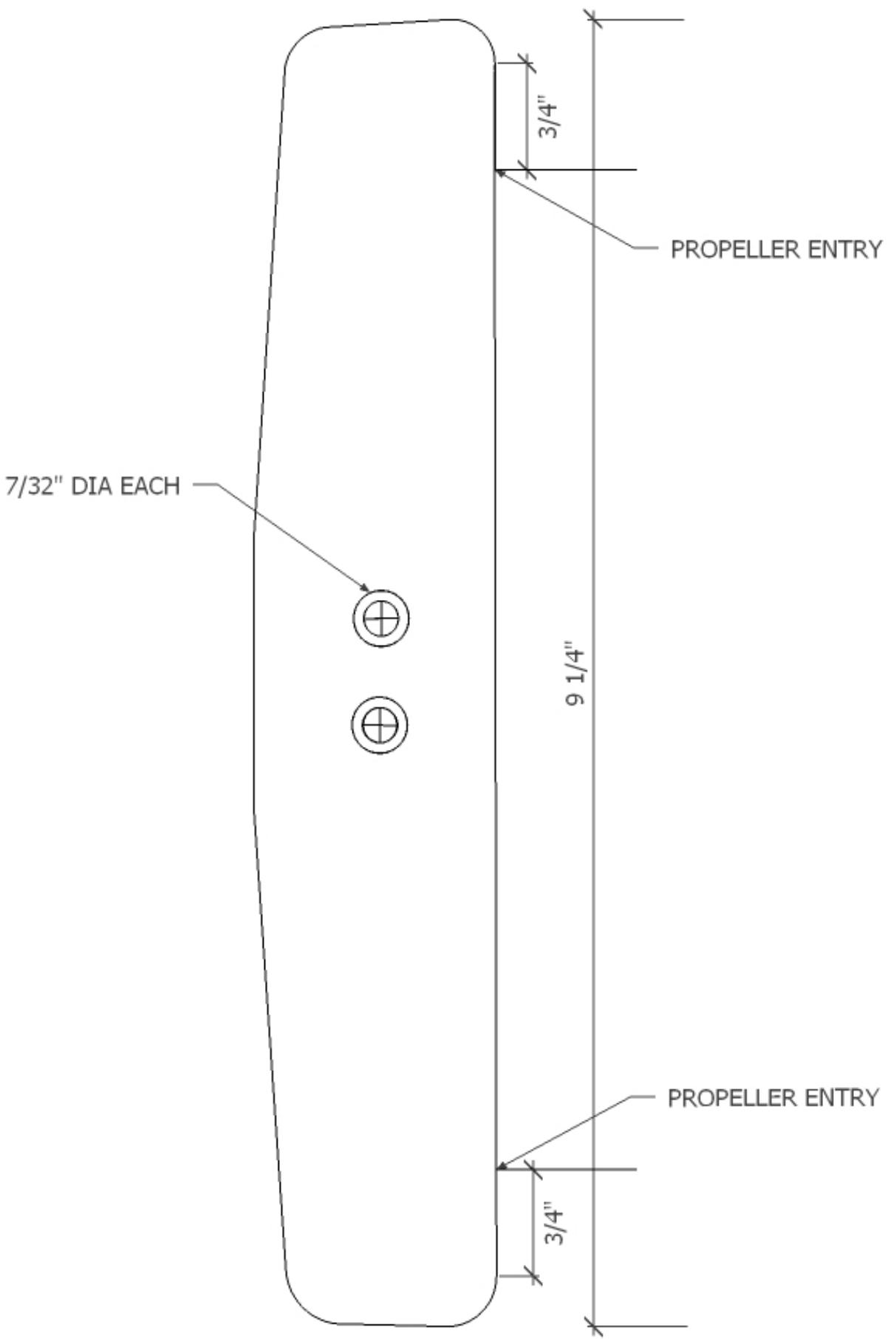
WWCH Seaplane Bottom Fuselage – To Scale



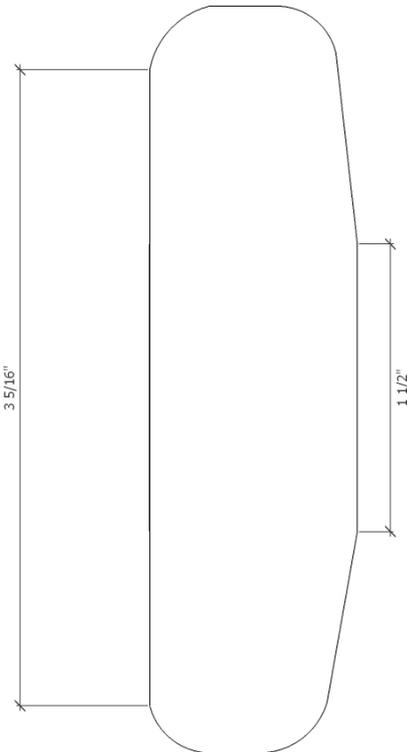
WWCH Seaplane Top Fuselage – To Scale



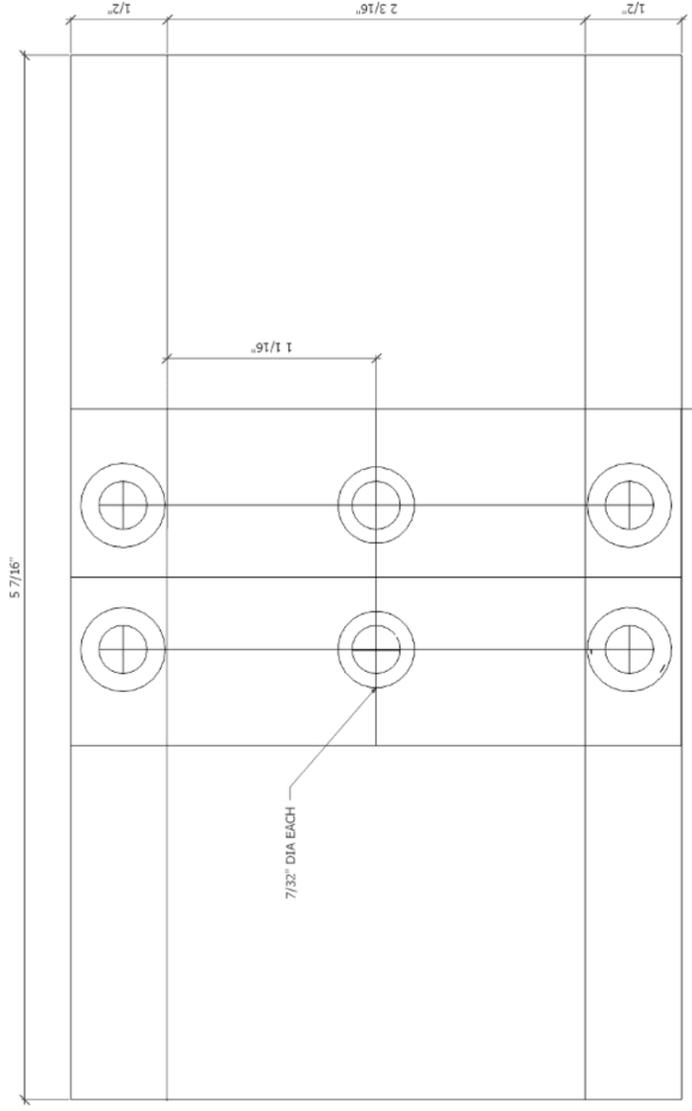
WWCH Seaplane Top Wing – To Scale – 1/2" thick



WWCH Seaplane Top Elevator – To Scale



WWCH Seaplane Pontoons and Base – To Scale



WWCH Seaplane Propeller Views – To Scale
Note that the Propeller is 3/4" thick.

