



Project 14445EZ: Weather Station

If you enjoy carving like I do, you probably sit down occasionally with a small scrap of wood and start to carve with no potential project in mind. That's what happened with the eagle on top of this weather station. Once it was completed, I liked it so much I had to come up with a project to use it on, so I designed this weather station to go with the eagle.

Weather Station Step-by-Step Instructions

1. Buy all instruments so you can make adjustments to the plans if any sizes vary from those already shown.
2. Select walnut from which to make all of the project, including the eagle.
3. Start with a carving block approximately 1" x 6" x 4". **NOTE: The extra length gives you something to hold on to while you're carving.**
4. Transfer the design of the eagle from the plan to the carving block.
5. Cut out the rough shape with a coping saw.
6. Use small knives and chisels to do the detailed carving. **NOTE: The feathers are greatly exaggerated and cut in bold relief, so they will show up from a distance.**
7. Use a molding head cutter with an ogee bit to make the molding to go around the octagon.
8. Make a saw kerf along the inside edge to complete the shape of the molding (see Detail D).
9. Make this molding strip approximately 30" long.
10. Glue the strip to a piece of 1" (3/4" actual) x 2" x 30" walnut. **NOTE: Both pieces should be fairly uniform in color and grain because when joined into an octagon, pieces from each end will have to match.**
11. Set the miter gauge on your table saw to produce a 22.5-degree angle.
12. Make a test octagon on scrap stock to make sure your table saw is cutting accurately. **NOTE: You must Make the angle of the joints extremely accurate, as even a small error in each joint will add up to a large gap when you have eight joints to work with.**
13. Cut the eight pieces of the octagon from the 30" strip.
14. Number the pieces as you cut them.
15. Use glue to assemble the pieces in numerical order; this way the grain and color will match.
16. Clamp the octagon with a web clamp or several strong rubber bands.
17. Allow the glue to set.
18. Cut out the circular hole in the center for the barometer with a jigsaw or coping saw.
19. Shape the four transitional moldings from larger boards.
20. Cut the moldings with the molding-head cutters as shown.
21. Cut a piece of 1" (3/4" actual) walnut to 3-1/4" x 3-1/4" to make the hygrometer.
22. Use a hole or jig saw to cut the hole for the hygrometer.
23. Use small carving tools to make the decorative recesses in the four corners (see Detail).

24. Make a hardboard router template for cutting out the recess for mounting the thermometer. The template should be slightly larger than the actual size of the thermometer to allow for the thickness of the template guide bushing mounted on the router base. Make the template a little small at first and make a test cut in a piece of scrap, then file the template until you achieve the exact size and shape needed.
25. Use the router equipped with a guide bushing and the template to cut out the recess for the thermometer to mount in.
26. Cut the piece for the thermometer to size. **NOTE: By cutting the recess first, you will have plenty of room to clamp the work down for the routing process.**
27. Glue and assemble all the joints, using dowels to straighten between each section.
28. Position the unit with its back against a flat surface.
29. Clamp down to prevent buckling.
30. Use a bar clamp to clamp lengthwise.
31. Allow the glue to dry.
32. Apply glue to the bottom of the top ornament, position it, and clamp it in place.
33. Finish with three coats of Watco Danish oil, sanded between each coat with 600-grit sandpaper.
34. Apply a final coat.
35. Buff with a soft cloth.
36. Leave the carved ornament unsanded.

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