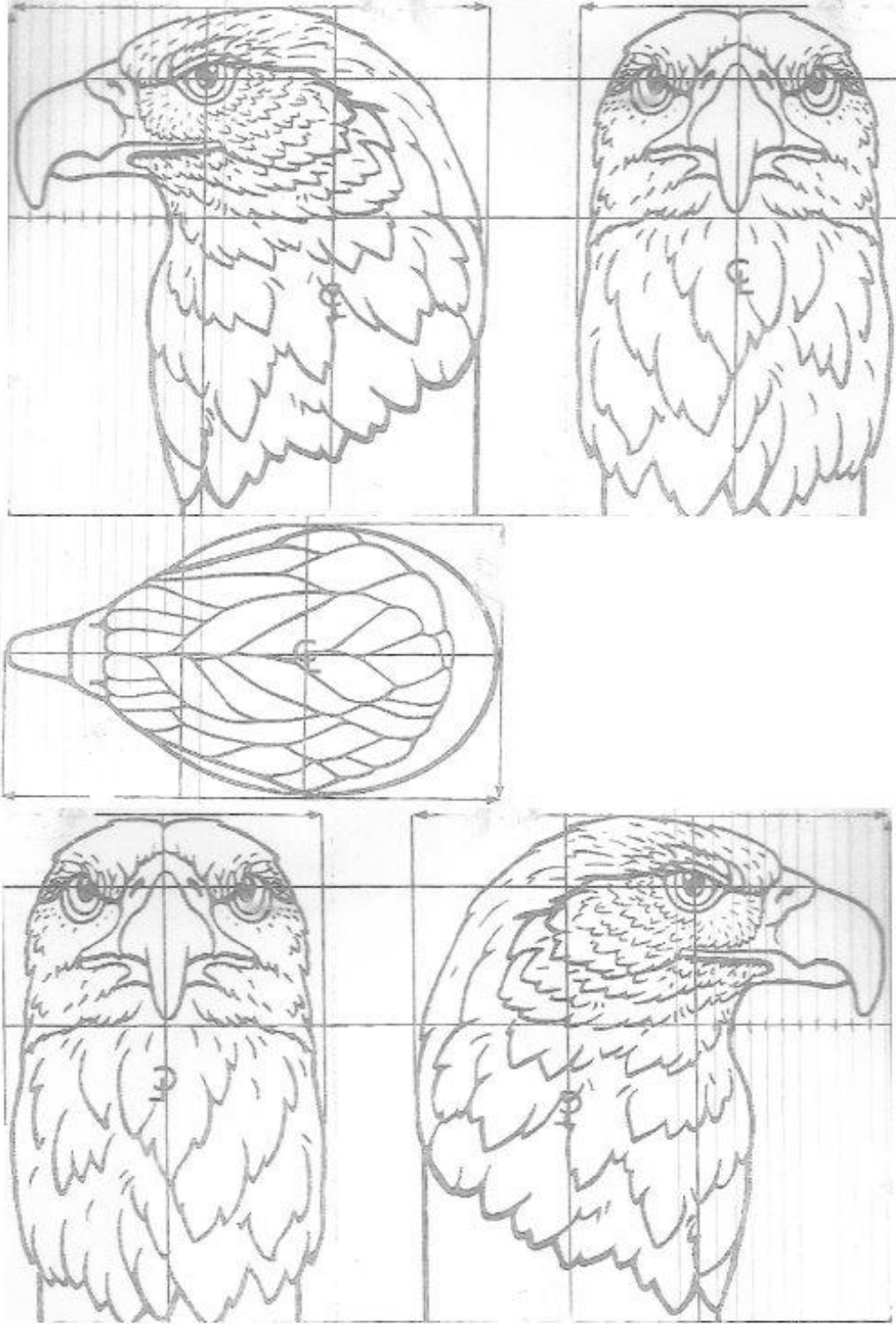
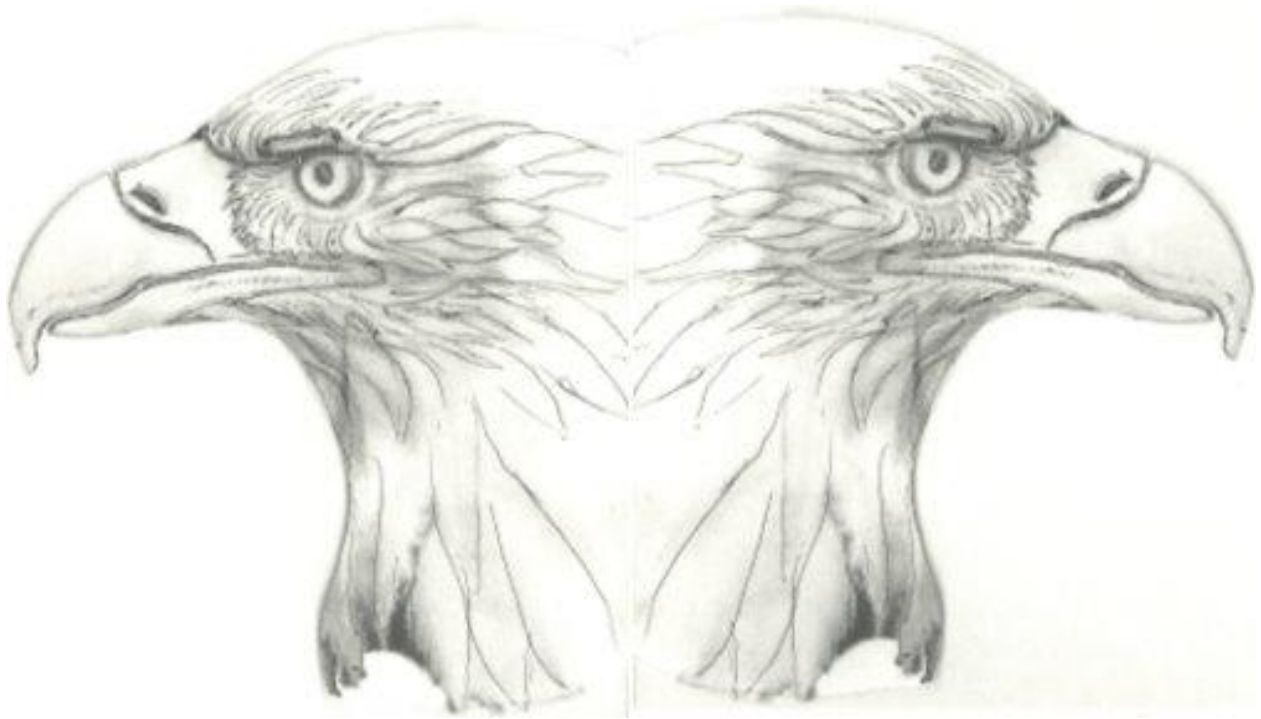


Ref a



Ref b & c



Ref d



Ref e



Ref f

Ref g eliminated



Ref h



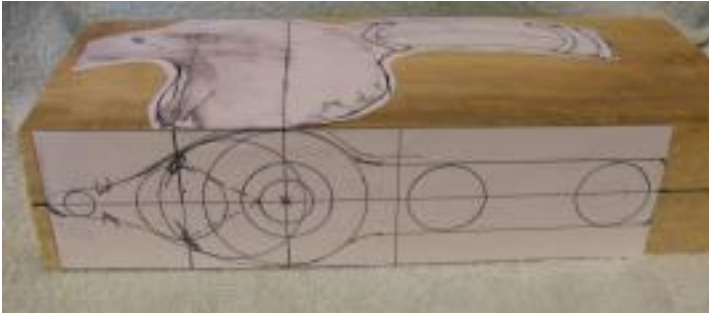
Ref i



Ref j



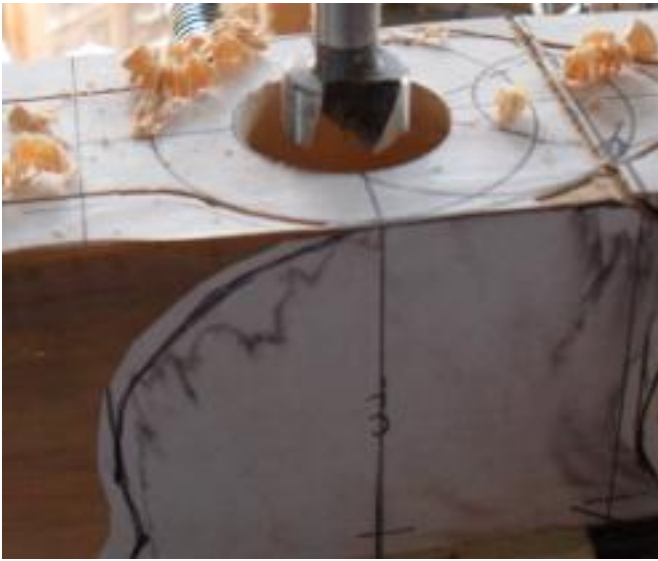
Step 1



Step 2



Step 3a



Step 3b



Step 4a



Step 4b



Step 6



Step 6



Step 7



Step 8



Step 9



Step 10



Step 10a



Step 10b



Step 11





Step 12



Step 13



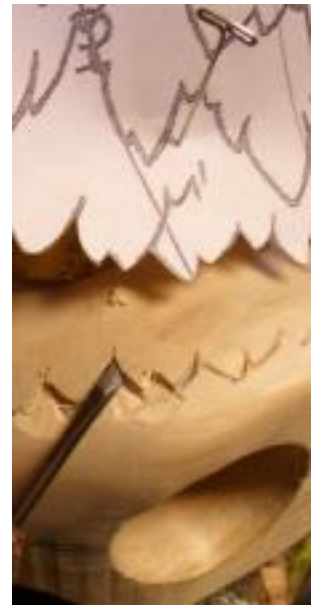
Step 14



Step 15



Step 16a



Step 16b



Step 16c



Step 16d



Step 16e



Step 17



Step 18



Step 19



Step 20



Step 21



Step 22



Step 23

# Text

- Ref. a Full sized pattern that can be glued to blank as shown in Step 2.
- Ref. b & c Sample feather patterns as shown on MWCA Lean on Me CD. Not to scale. They need to be enlarged by 125% to be able to trace onto a roughout. (Step 16a,b,d)
- Ref. d Use this to trace eye, brow line, and mouth onto one side of roughout. (Step 5)
- Ref. e Color front view of eagle head. Notice; the width of the eyes in comparison with the width of the mouth, the narrowness of the beak, the nares on the same level as the eyes, the roundness of the head.
- Ref. f Black and white of Ref. e. I find it sometimes easier to interpret photos this way.
- Ref. g I eliminated Ref g as being redundant.
- Ref. h Top view of eagle head. Notice the shape (like a spear point) and the joining of the beak with the feathers (looks like an inverted "V"). Again notice the narrowness of the front of the beak compared to the back.
- Ref. I Compare; distance of nares between eye and tip of beak (about half way between), the center of the eye is half the distance from the top of the head to the mouth line. Notice; the eye is not all pale yellow, the eyelid is not perfectly round. Notice the pupil when viewed from the side is not directly in the middle of the eye ball. The "horny" protrusion above the eye.
- Ref. j Great reference showing the beak's structure. Notice again the color, the nares, the horny "bone" above the eye, and the color and shape of the eyes.
- Step 1 Mark center lines on blank. Make sure blank is square.
- Step 2 Paste pattern on blank aligning with the center lines.
- Step 3a I use a 1.25" forstner bit to drill the first hole approx. 1" deep.
- Step 3b I now drill the 3/4" hole approx. 2" deep aligning with the center of the previous hole.
- Step 4a Using a 1/4" blade I cut the top profile, stopping the blade just short of cutting through. Start from the back and front and work to the middle. This will leave a flat surface on each side of the rough out when finished sawing.
- Step 4b Now do the side. Start at top of head and work to the tip of the beak, back the blade out, and then come back up to the beak from the bottom of the blank. Then cut from the back of the handle towards the front.

- Step 6** Using Ref. d, mark brow line, mouth line, nares , and 3/8” “U” (not a perfect circle) under the brow representing the eye. I use the device pictured to draw a center line on top and arbitrary reference lines on the side of the rough out.
- Step 7&8** Using a compass I find the center of the eye a draw an arc from the top reference line. I immediately go the other side and draw the same arc on the other side. I then draw another arc on the first side using the bottom line to the center of the eye. I then immediately (without changing compass setting) go to side two and scribe it in. In this manner I have exactly located center of both eyes. I continue doing the same thing to all the major intersections of my drawing.
- Step 9** Check to make sure everything is on the same plane.
- Step 10** Using calipers find the width of the mouth and eyes from ref. f. Remember the width of the mouth is slightly less than the width of the outside of the eyes.
- Step 10a&b** Finally it’s time to pick up some carving tools. I start by making stop cuts on the reference lines I have made. I use a flexcut #8 sweep by 3/8” wide gouge to make my “U” cut for the eyes. Notice it is not a circle. Carving a circle under the brow will preclude giving our eagle that fierce look.
- Step 11** I use various tools to round out and carve my head including knives, gouges, and sanding drums.
- Step 12** Super glue is used to reinforce the beak to prevent breakage and give it a nice rich finish. Sometimes I use that as my final finish on the beak and do not paint it.
- Step 13,14** A ¼” ruby ball is used to hollow out the eye socket. I grind out the socket on the angles indicated in Step 13. In this demo I set the eyes using wood filler putty. I achieve the proper depth and angle (looking forward as in ref. e, i, and j) The tools pictured are homemade (brass rod stuck in an empty ball point pen barrel and a brass tube, both cut on a 45 degree angle). The end of a pencil eraser also makes a good tool for taxiing the eye around.
- Step 15** I use a small ruby ball to cut in the eye lids.
- Step 16** When I made my first eagle head, using the methods as shown in the MWCA Lean on Me CD, I traced the feather patterns shown in the article taken from Carving Illustrated. I sometimes burn lightly through the pattern as shown in Step 16d. I then remove the burn marks by stop cutting with a dockyard mini skew. After stop cutting I round off the sharp edges with a bullet shaped burr that has a sharp point.
- Step 17** I use a ceramic texturing Guge-stix along with my large bullet shaped burr to give the final texture to the feathers.
- Step 18** On this head I’ve stippled in some texture using a homemade burning tip made from tig welding wire.
- Step 18** Defuzzed the carving using a scotch pad.

**Step 20** I sealed this head with Deft lacquer thinned 50/50 with lacquer thinner.

**Step 21** I painted with a first coat of smoked pearl topped with titanium white.

## **NO TWO EAGLE HEADS WILL COME OUT THE SAME**

**This step by step method is only one way I do an eagle head. I am providing this to the Michigan Wood Carvers to use as a go by for the less experienced carversto to enable them to get a start.**

**All tools used can be obtained from Frank and Phyllis Burgie's Cedar Bird Shoppe.**

**Harold Joseph**

