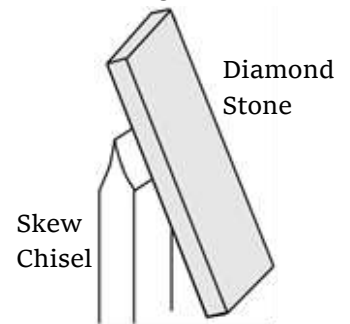


## Sharpening of the Alan Lacer Skews – HCT460/461

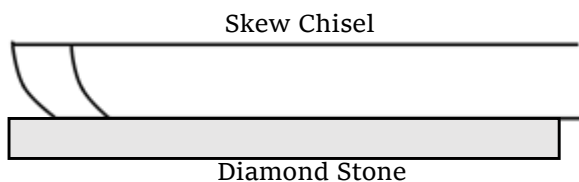
First let me describe the shape of the cutting edge. About one-fourth to one-third of the edge from the long point is a straight line - and  $90^\circ$  to the long point edge. The balance of the edge is a curved shape. Two other aspects of the edge are critical: try to maintain an angle of approximately  $70^\circ$  from point to point, and grind the bevel length to approximately one and a half times the thickness of the steel.

Once these shapes and dimensions have been achieved, actual sharpening of the edge is next. Set the tool rest of a dry wheel grinder to the preferred bevel angle (achieved by grinding the length of the bevel to one and a half times formula). Start with the straight part of the edge held horizontally (or parallel to the axis of the grinder) and grind that region. Next, with a pivoting motion, grind the curved section when it is moved into a horizontal position on the wheel. I try to maintain the same position on the tool rest and simply pivot or rotate the tool from a single point. Grind until sparks just appear over the top edge of the tool. Turn the tool over and grind the other side in the same fashion. The objective is to grind a slight hollow-ground edge with a single facet. Work slowly and keep the skew flat on the tool rest of the grinder.

Next, I hone four faces of the skew. This is best done with a flat diamond honing stone in a “fine grit” of 500 or 600. Since there is now a hollow-ground edge, simply touch the stone at the back of the bevel, close the angle towards the cutting edge until you have a two-point contact at the back of the bevel and just below the cutting edge. Work the honing stone along both of the long cutting edges in this manner - normally with a “back and forth” motion.



Then place the stone on the flat edge behind the long point of the skew. Hone this area with the same back and forth motion, being sure to keep the stone flat on this surface. Finally, hone the area behind the short point in a similar fashion - even though that section has been rounded all the way to the ferrule, you can still refine the short point by keeping the



hone flat on the edge behind the short point, Honing is excellent following grinding to refine the edges, but also is used to keep the edges sharp while working So, hone frequently and thereby avoid excessive trips to the grinder.

### Thoughts on this grind:

I have tried a variety of grinds for the skew and prefer this style. I must admit that I have found this grind - or similar grinds - being used by woodturners in North America over much of the last century. The advantages of it as I see it are several: the straight section is excellent for peeling cuts (much like a large parting tool) and slicing rounded pommels with the long point down; the straight section also serves as a warning to stay clear of when doing planing and rolling cuts (such as beads) and with the short point down; the curved section works well for planing cuts in “chippy” woods; the curved edge wraps over a curve better than a straight section (as in convex shapes); the curved area can be used to scoop concave shapes.

Additional articles on the skew, sharpening and honing can be found on my web site: [www.alanlacer.com](http://www.alanlacer.com).

Good turning to you!

A handwritten signature in black ink that reads 'Alan Lacer'.