

PROFILE

The Tony Pass "Almost Flathead" banjo rim, www.tonypassbanjorims.com

By Ian Perry

Since 2000, Tony Pass has been revolutionizing the banjo world with his development of the modern block rim. With over 30 years of experience as a design engineer, Tony decided to apply his considerable skill and creative mind to improving what he saw as the flaws in the standard 3-ply shell. Along the way, he not only breathed new life into the concept of the block rim, but also designed the "Thin Skirt" rim, which enhances the deeper tones of a banjo by removing some of the wood from the inside surface of the shell, and the "Woody" rim, which replaces the standard metal tone ring with another layer of wood and produces a beautiful, slightly mellower tone, not to mention reducing the weight of the instrument by about 3 pounds! Tony's block rims are now found in Stelling, Hopkins, and Desert Rose banjos, and are option through most builders. They are also used as an upgrade to replace standard 3-ply shells in Gibsons and others. For more information on the development of Tony's block rims, see *BNL* March 2008, and articles by Bob Carlin and Donald Nitchie which can be found on Tony's website.

Now an iconic figure amongst banjo players and builders alike, Tony's latest brainstorm is what he calls the "Almost Flathead" rim. Tony describes how the concept evolved: "At the 2006 IBMA show we had both flathead and archtop

woody banjos in our booth. They were both a complete success, but something very interesting happened by the end of the week. Many people preferred the sound of the archtop over the flathead. They said the archtop was a little cleaner and clearer, but the flathead still had more bottom end. I left the show with a new project—to put the clean, clear sound and the bottom end all in one rim."

Tony goes on to explain how flathead and archtop configurations affect the tone of a banjo: "The most noticeable difference between a flathead and an archtop is the vibrating area of the head. The flathead (Figure 1) vibrates over 10 13/16" of the 11" span, while the archtop (Figure 2) vibrates over 9 1/2." This alone is reason enough to explain the sound difference, but there is more. To me, the way the head leaves the tone ring is the most obvious one. They have completely different releases. On a flathead, the head leaves its stretcher band upward, making contact with the crown of the tone ring and staying in contact over the radius on top, then leaving the ring at point "A" for 10 13/16" to contact the ring again at the other side. At point A, it is a gradual release as the surface of the radius on the ring falls away from the head."

"The archtop (Figure B), has two distinct ribs, an outer and an inner. The head leaves its stretcher band upward, making contact with the crown of the outer rib, across the 3/4" span of the ring at a 15 degree angle, until it makes contact and travels across the top of the inner rib. From there it leaves the ring at point (B), which is a sharp edge that suddenly drops away and continues to travel across the 9 1/2" span."

This difference of having the head

come off the curved crown of a flathead ring or the sharp edge of an archtop ring left Tony wondering what would happen if he combined the larger vibrating surface of a flathead with the sharp edge of an archtop. To do this, Tony realized, "I would need to close the gap, slide the inner rib outward to meet the outer rib, and open the archtop from 9 1/2" diameter to 10 5/8" diameter." (see Figure 3, Point C).

Tony was so pleased with the result that he sent rims to David Schenkman and Kyle Smith for testing, both of whom had flathead banjos with Figure 1 configurations to compare the new rims against. "Dave was the first to respond. He received the new banjo and called to say, 'Killer out of the box...cleaner, clearer, with more pop...excellent bass response.' Kyle called later and, ironically, used almost the exact same words."

Tony originally considered calling the new rim an "Extended Archtop," but Schenkman thought that might turn people away because it would lead them to believe it was just another archtop, rather than a new version of the more popular flathead design. With that in mind, Tony thought, "Well...it's just a 1/16th of an inch short, and that makes it 'almost a flat head.'"

Since introducing his new Almost Flathead rim at the 2009 IBMA convention, the response has been very enthusiastic. "It has become my most popular selling Woody rim. However, it is the least well known. Sometimes when mentioned in chat lists, some pickers have never heard of it and want to know more. Hopefully this article will answer any questions and clear up any misconceptions."

Those who want more info should contact Tony through his website.

