

## **Upper Class**

Taylor is calling the introduction of V-Class bracing "a substantial new guitar development for 2018". To inaugurate the concept, they invited key media from across the world – including *Guitarist*, of course – to California to explain exactly what makes it different

n these days of austerity, press junkets are few and far between. So, it was with some surprise that we were invited to visit Taylor to get the skinny on "something significant". It still seemed a long way to go for a three-day visit especially as we had absolutely no idea what it was we were going to see. But in a perfectly managed launch, at Andy Power's house and home workshop in Carlsbad, California, and later at a local recording studio, both Andy and Bob Taylor finally spilled the beans on V-Class bracing.

"The insides of this guitar are completely different from any guitar that has ever been built," states Andy showing off the Words Dave Burrluck Photography Olly Curtis

K14ce Builder's Edition. "It's not an X-braced guitar – we've been working with that system for a long time. It's almost embarrassing how simple it can become. There's not much to it! There's some subtlety in there, those shapes have some specific things built in, but when you look at it you see a little bit of an archtop guitar in there, a bit of a mandolin in there, and a little bit of a classical guitar, and a little bit of the steel strings that we know and love."

Passing around a V-Class braced top, we're struck by the simplicity. Indeed, the genesis of the design stems from a simple question in terms of the flat-top steel string guitar: how to make it better. "There are two ways you can make it better," says Andy. "You can make it feel good and make it sound good. Musicians like familiarity. We grow up hearing sounds... that's a Strat, that's a Tele, that's an AC30, a D-28, an archtop guitar. That's good, I don't want to change that. I want a flat-top guitar to sound like a flat-top guitar. But when I think about the ways a guitar works, I think we've missed a few things. When I think about instruments at large, string instruments have a few similar lowest common denominator similarities.

"As a 'string holder' there are two factors that are opposing forces. To make a string holder that allows the string to vibrate for





a really long time you have to make it really strong – it has to be rigid. Imagine a Les Paul, a '59. Big thick neck, 17-degree neck angle, [the strings] anchored really rigidly at the headstock and down here [the bridge/tailpiece]. The notes last so long that we make jokes about them in *Spinal Tap* – we call it sustain. That's one end of the spectrum.

"The other end? Where does volume come from, what is the sound we hear? It's nothing but air pressure; a pressure wave moving through an air mass. That's what sets our ear drum in motion. The strength of that air pressure wave is what we perceive as volume. So what do I need to create air pressure? Something that moves air! That requires something that's flexible, but if I need strength on one side to make notes last a long time I also need flexibility to make those notes loud.

"So, if I had a Les Paul on one side and put a banjo on the other – this drum head [the banjo's top] makes it obnoxiously loud, but the notes don't last very long, it's a tiny short plinky thing. So flat-top guitar makers tend to live somewhere in the middle and compromise the two. If you're going to build a Flamenco guitar you lean a little closer to the banjo side; if you're going to build a classical guitar you lean a little more to the Les Paul side." It has a voice that flat-top guitars don't usually get because it's just working in a whole different way

Instead of arranging the main support braces as an X, Andy experimented with placing the two longitudinal braces in an inverted V shape either side of the soundhole. The V adds the necessary stiffness length-wise along the top, in the direction of the strings, while the fan braces that extend out from the lower part of the V to "control the flexibility across both sides of the lower bout, creating a more orderly side-to-side rocking motion".

"So I end up with a guitar that has good volume, with notes that last longer than they should," continues Andy. "This E natural (9th fret G-string) is traditionally one of the weakest notes on an acoustic but not anymore. [The guitar] gets to be loud everywhere, it gets to have nice dynamic range, it gets to have a voice that flat-top guitars don't usually get because it's just working in a whole different way."

## **Intonation Pay-Off**

About halfway during this design process Andy got up early, as he does, to go surfing. "It was right after a storm and everything was mismatched. I'm looking at the ocean and going 'It's all confused'. I thought, 'I'll be darned, that's exactly what's happening in my guitars: they're confused. They're fighting, there's friction. So what if I just made that go away. What if I made it a real calm, still day? Perfectly smooth, good waves coming in.' That's what I wanted.

"So I changed the intonation of the guitar, not by changing its compensation, but by changing the way the guitar vibrates. I can't fix the notes we play, what we call equal temperament, but what I can do is make it better enough by just taking the fight out, so we just don't have as much as we used to."

To demonstrate, Andy played a high position E major triad: "Hear there's no beating? No fight in the note. It just sits there like it had perfect harmony. Normally I'd have to stretch tune this G# [the 3rd] but here it's perfectly in tune. Every note sounds in tune and has the same character. The notes just kinda sit there... once you take that fight away, it's amazing how the guitar can disappear because it will start to reflect only what the player brings. We didn't change anything about the fret placement or compensation. It was

- It was Andy's love of surfing that inspired him to resolve the issue of conflicting waveforms on guitar tops

exclusively the bracing. It shows me that equal temperament for guitars was better than I thought."

"In its simplest form," chips in Bob Taylor, "I think Andy was saying I'm going to make the guitar stiff this way [longitudinally] and I'm going to make it flexible this way [across the body] and it solved a multitude of sins. You're hearing that in the intonation. Was Andy trying to solve intonation with this? No, he was trying to solve this conflict between stiffness and flexibility."

'Sonically more comfortable' might be a good sales line for V-Class bracing, but making the actual guitar more comfortable is certainly part of the rationale behind the K14ce Builder's Edition, which strongly hints at a new direction. "So on the guitar I have here [our K14ce Builder's Edition] the armrest is cool; but this," says Andy, pointing to the scoop in the treble cutaway, "is kinda like an 'armrest' for your left hand. It feels like the electric guitar I got to play as a kid. Take a bit away and you can reach more. Make the corners comfy; I don't like sharp things - it's not fun to run your hand on sharp things. The violin world got that. I'll just trim it a little and it feels better."

Of course, playing comfort has always been a part of Taylor. Bob Taylor made necks slender, along with having, in acoustic guitar terms, a really low action. Yet here

- 2. The traditional X-brace has been a mainstay for acoustic guitar builders for many years
- The Taylor Factory in San Diego may soon be integrating the V-Class bracing into more of its instruments





The guitar is stiff longitudinally and flexible across, which solves a multitude of sins

it's more than that – even the 'silent' satin finish is considered and comes from Andy's extensive playing experience. "You get excited and you start sweating especially when recording," says Andy. "This guitar has a different type of finish – it's durable but not shiny, because shiny finishes squeak when you sweat on them. This is more comfortable. All these things make the guitar more comfortable."

Exactly how the 'new engine' V-Class bracing, not to mention the ergonomic changes to the Builder's Edition model, will work their way into the future Taylor line remains to be seen. "We think they're fun," concludes Andy, "but it'll be up to players to decide whether or not they agree. And that's how it should be. This is just a fun new toy to play with – we feel it does a better job expressing what the musician wants to play." Having spent time with V-Class, "substantial new guitar development" seems spot-on.

## V-CLASS: IN THE STUDIO

Evaluating guitars, especially acoustics, isn't always easy. You're not really hearing what your audience hears, and as the reviewer, we know it's supposed to be 'better', which can sway what we perceive. What if we levelled the playing field and recorded each guitar without telling the player which one was which?

We asked pro-acoustic and electric guitarist Isobel Kimberly and studio owner, producer and engineer Mike Westergaard to be our guinea pigs. Both are Taylor players. Isobel brought along her wellgigged 510e as a reference and played that along with our two 914ces (the first one X-braced, the other with V-Class) and our reviewed K14ce Builder's Edition.

Both the 510e and X-braced 914ce had a slightly lower, output. The V-Class 914ce was definitely kicking out more power - noticeable both on the picked and strummed recordings. The K14ce was slightly lower powered, but we all commented on its tonal balance. The key comparison here was, of course, the two 914ces. There's nothing wrong at all with the X-brace version, but as Mike stated the V-Class version sounded like he'd done a little postrecording tweaking to enhance the initial recording, cleaning up the lower midrange and enhancing the highs.

To that end Mike would be happier to work with either V-Class guitar, preferring the K14ce; likewise, lsobel stated it "pleased me most as a player – the balance, the refinement are both very encouraging and pleasing to my ears. I really like the satin finish too, it gives a more papery texture to percussive taps."

It was a simple but hugely effective test: to our collective ears, the V-Class sound better.