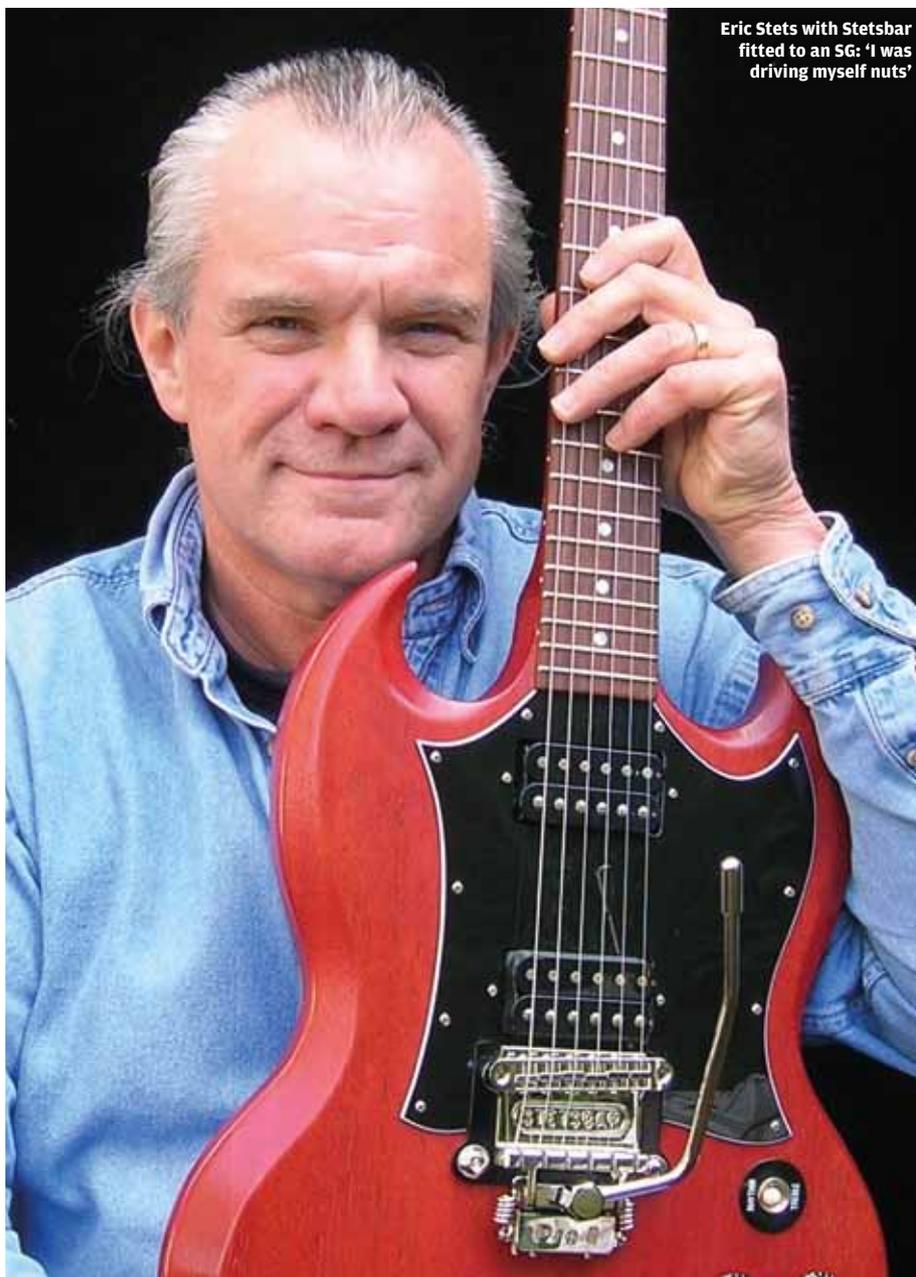
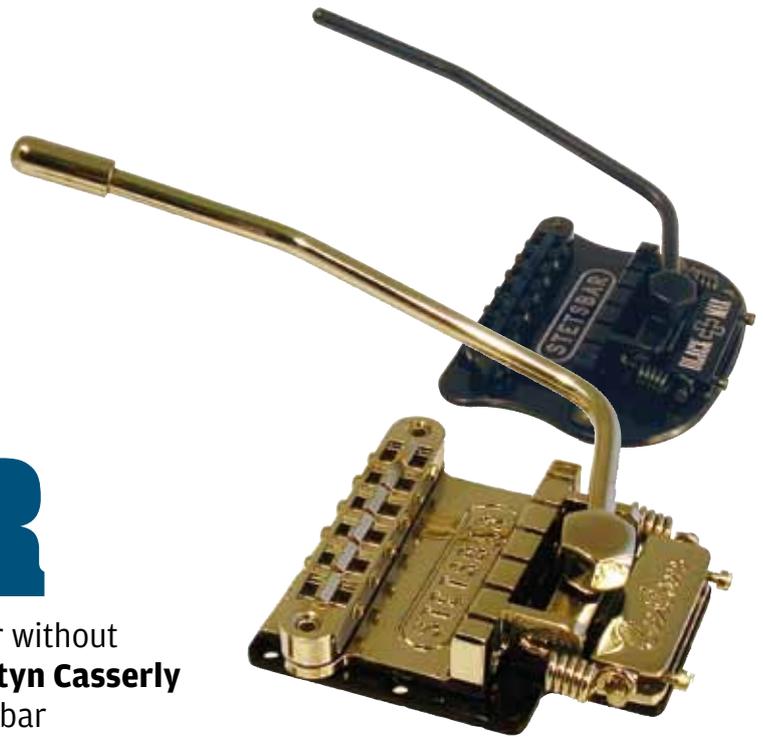


THE STORY BEHIND THE
STETSBAR

RAISING THE BAR

Inventing a vibrato that can fit almost any guitar without drilling a hole has always been a holy grail. **Martyn Casserly** meets a man who managed it, Eric Stets of Stetsbar



Eric Stets with Stetsbar fitted to an SG: 'I was driving myself nuts'

Coming up with innovative new ways to solve enduring guitar issues can be a thankless task. In an industry where the most popular modern instruments are practically identical to those from 60 years ago, it takes quite something to break through the ingrained image of the instrument that most of us hold dear. Thankfully there are some people out there who are made of the right stuff, and who are willing to go against the grain in search of designing a better mousetrap. One such man is Eric Stets, who for the past 25 years has been building the Stetsbar vibrato system in his New York state workshop, while musicians play his creations on some of the biggest stages in the world.

The genesis of his revolutionary system came from a simple problem he encountered while playing as an amateur musician – having to carry several instruments to each gig. 'One of the reasons I had multiple guitars was for vibrato,' Eric explains. 'My favourite guitar was my '71 Les Paul Custom, which did not have a vibrato on it.'

Thinking there must be a better way, Stets decided to explore the options of retrofitting a system on his beloved guitar, but found the alternatives on offer rather paltry. 'I decided to hunt down and see if anything was available other than a Bigsby,' continues Eric, 'because I haven't had success with the Bigsby... whenever I used one it seemed to be out of tune, and I found that problematic.'

'After calling around to different music shops and searching, there really wasn't anything out there. So I thought, as a machinist, I should be able to come up with a design that fastens to the stop bar's bushes.'

Having plied his trade as a professional metalworker for around 30 years, and recently having started his own machining business, Stets began tinkering with designs when time permitted. But after developing the initial

early prototypes, it became evident that the project would not be simple to complete.

'The problem I was experiencing,' explains Eric, 'was you cannot stretch and relax strings over a fixed bridge. The resistance at the point of the saddle on the bridge would resist the balance, so to speak, of the tension of all six strings versus the springs on the other side of the equation. They have to be equal for stability to be established. No matter how hard I tried, I kept coming back to the common denominator that the bridge must move with the strings, and to get that design compact enough under the bridge and above the guitar surface – because I was not going to plunge a router or a drill into that '71 Les Paul.'

With the '80s drawing to a close, Stets continued exploring different ways to solve his vibrato problem. More after-hours sessions yielded promising units, but each one had issues. Slowly, the idea became something of an obsession. He knew the answer was there somewhere, even if it proved frustratingly elusive.

'I started driving myself nuts,' says Eric. 'I was hitting brick walls on the design. I'd wake up at four o'clock in the morning with "I've got it!" and I'd have to write it down or I'd forget it. Studying mechanical applications, linkages, gearing and movements, and seeing some of the brilliant mechanical designs that people come up with over the years and stealing their ideas...'

The real lightbulb moment came not in the middle of the night with a revelatory spark of inspiration, but instead through a rather more mundane, although still significant, event. 'I had a salesman call on me,' Eric recounts. 'This man sold products – bearing-related motion industry they call it – and he gave me a catalogue where I saw these little



Though pioneered on a Les Paul, there is now a Stetsbar to fit the majority of guitar designs. Above: The original Stetsbar Ad.

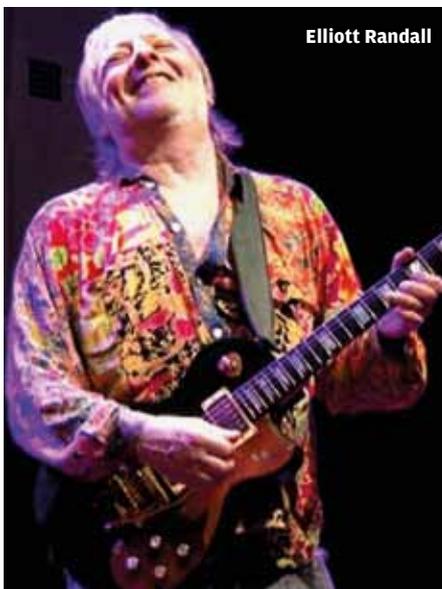


linear bearings. I said, golly, I'll betcha those will work in my design!'

This humble item did indeed prove to be the final part of the puzzle. The micro-roller bearings meant he could finally build the system that would meet all of his stability and size requirements, and the Stetsbar was born.

In essence the unit consisted of a mounting plate which used the existing fixings on a guitar to attach it to the body. On top of this sat another plate that held a tunomatic-style bridge and the vibrato

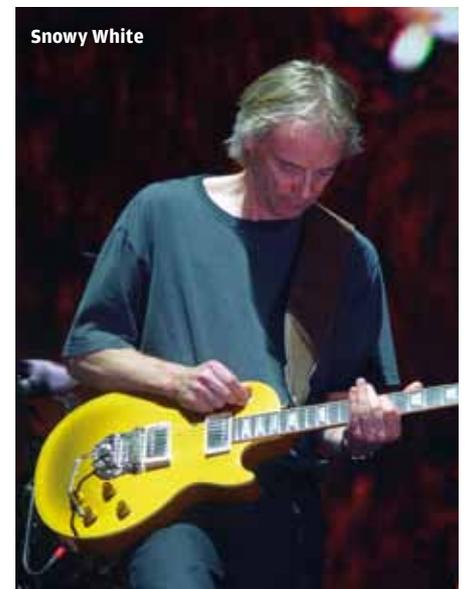
system. When the player pushed the vibrato arm down, the whole top unit slid forward on the micro-roller bearings, lessening the tension and therefore dropping the pitch of the strings. Springs ensured that the unit returned to the correct distance when the arm was released, and as this was a floating system the player could also pull the arm up to raise the pitch. The lack of friction points meant that tuning remained very stable, while also keeping string breakage to a minimum. Best of all it was a non-destructive design. ➔



Elliott Randall



Jan Akkerman



Snowy White



so it could be fitted to a vintage instrument such as a Les Paul or a ES-335 without the need to alter the guitar itself, ruining its resale value or its aesthetic beauty.

Following on from the great innovators in history, Stets put his money where his mouth was and went about fitting his vibrato system to his own Les Paul Custom, and the results were just as he'd envisioned. 'I was ecstatic!' says Eric. 'I was dancing! It was finally fully functional... I had the greatest thing since sliced bread. I was very excited. I looked at it and it was as ugly as sin, but it was great, it played, it stayed in tune... it worked.'

Taking the unit out gigging drew interested responses from fellow musicians, who particularly liked the idea of a system that could be fitted without damaging the guitar in any way. Stets knew he might be on to something, so he wisely decided to register the design at the patent office. 'After a year and a half and thousands of dollars, I found myself with empty pockets,' he recalls. 'So I thought, gosh, maybe I should make a few of these things, and maybe I can sell them.'

Balancing the demands of an existing business with this new fledgling venture meant that production was always kept to a modest level. This suited Eric, as it allowed him time to keep refining the design. News spread by word of mouth among local musicians, and before long Stets was also advertising in guitar magazines and even making an impromptu appearance at a NAMM show.

'My first experience with NAMM was the winter show in Anaheim, where I couldn't see myself affording a booth,' Stets explains. 'So I did what I was told not to do, and that was to bring my product in a little briefcase and get in line and talk to people and get it exposed. I walked my legs off. It wasn't too comfortable – I was in a serious accident in 1984 and I had extensive leg and foot injuries, so it was a



'It wasn't a handsome unit, because I was looking at it as an engineer. I needed to put the art side into the design to make it more pleasing to the eye'

real challenge. But it was exciting... seeing all the latest instruments, amplifiers and effects, I felt like a kid in a candy store. It was as if I was in the Land of Oz.'

While NAMM didn't result in an instant boost to the Stetsbar brand, it did help more people become aware of the idea and its possibilities. 'I got a lot of "Yeah, yeah, yeah, that's nice" responses,' says Eric, 'but there were some people who saw a value in it. I wasn't really prepared at the time if a distributor had said "I like that, I want to order a thousand units a month".'

One person who did see the potential of Stetsbar was Peter Miller, who ran the UK distribution company Madison and Fifth. Peter takes up the story...

'I used to travel to NYC on business about six times a year. Waiting for my flight at JFK I picked up a copy of *Guitar Player* and noticed a classified ad for Stetsbar. Back in the UK I called Eric, and bought one. Having fitted it to a Les Paul and put it through its paces, I just thought it was a perfect product – much better than any other trem I'd played. I called Eric and asked him if he had any European

The Stoptail model solves the problem of fitting a vibrato to an archtop – all without a single hole being drilled

L-R: Stetsbars for a Fender Strat, a Gibson Les Paul and a Fender Telecaster



maybe put more adjustment in the bridge kind of thing, you know. Just improvements, from that point.'

The Stetsbar Pro II became the fulfilment of his work. Released in 2009, it featured a new Floating Lock which gave the player a choice of having the standard full floating Stetsbar system or locking it for 'down only' operation. Production was moved from the workshop in West Seneca, NY, to the factory in South Korea that manufactured the original Floyd Rose. This enabled the company to fulfil the many new orders while also offering customers a lower price.

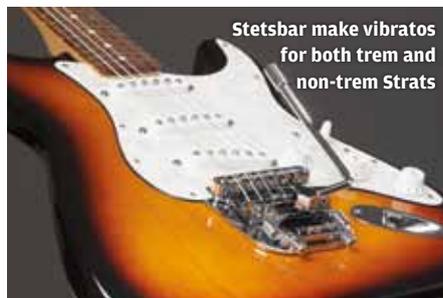
Stetsbar also picked up an impressive range of endorsees, including players such as Jan Akkerman, Randy Bachman, Snowy White... and Elliott Randall of Steely Dan fame. 'Without doubt, it's my absolute favourite vibrato handle,' states Randall. 'Why? Because of its sensitivity, nuance, its totally unique design, and the uncanny ability to actually keep the guitar strings in tune amidst all the action. I was introduced to Eric Stets by a mutual friend and within minutes I felt confident that not only had I discovered a uniquely superior product, but that I'd made a new friend. There is a reason he is becoming a legend. It's well-deserved. For me, Stetsbar is unquestionably a 5 out of 5. Or maybe even a 6 out of 5! Stunning.'

Now, a quarter of a century after he first started building prototypes, Eric Stets has achieved the kind of longevity that has proven impossible for so many other innovators in the guitar industry. His small company has survived two financial recessions, the explosion of low-price instruments that make it easier to afford guitars for different purposes, and all while continuing to grow and refine its product. It's been quite a ride, and he's learnt many a lesson along the way, but he's never lost the passion for playing that started him on the journey in the first place.

'It's really been a challenge,' he concludes, 'and it's been a wonderful experience. It's afforded me a number of things that I never thought that I'd get to do outside my humble little shop. It affords me to buy a lot of different guitars, and I'm gonna find one out there one day that I can really play well!' 🎸



Early Stetsbar in gold; black and chrome are also available



Stetsbar make vibratos for both trem and non-trem Strats

distribution and he said 'No'. So, on my next US trip I went up to meet him, and we spent a day getting to know each other and the partnership really started there.'

Working with Miller, Eric set about reshaping the unit into something that would be more palatable to the general guitarist. 'It wasn't a handsome unit at all,' Stets admits, 'I was looking at it basically as a mechanic, designer, machinist, engineer – it worked, what else should I need to do? Well, I needed to put the art side into the design, to make it more pleasing to the eye.

'I thought we could replicate the body shape of a guitar for the mounting plate, but we found that there were so many different body shapes that if I tried to copy one shape then it didn't look right on another. With the help of Peter, exploring ideas, we decided to

go with more of a geometric shape that would be more applicable on any guitar.'

Having based the initial mechanical design around the Les Paul, Eric was encouraged to discover that the relationship between the spacings of Gibson's stop bar and bridge had actually been adopted by most manufacturers, meaning that his unit was compatible with a huge range of instruments. New designs for Fender Strats and Teles followed, excellent reviews began to appear in the music press, and with European distribution spreading the net even further Eric had to get himself a passport for the first time so he could travel to meet some of these new customers.

Ever the engineer, though, he continued to find ways to improve his creation. 'I wanted additional functions,' he explains. 'Maybe I wanted to shape the arm a little different,