



Dan Hedges

With the continuing growth in popularity the guitar is currently enjoying, it's not too surprising that the *craft* of guitar making has been all but phased out in favor of the more "productive" techniques of machine-age manufacturing. Despite the glowing claims that manufacturers tend to make regarding their latest models, it's all too obvious that in many cases the overall quality of the instruments produced has been steadily deteriorating over the past several years, with some characterized by shoddy workmanship and inferior materials, coupled with a marked increase in the price demanded for these instruments. As a result, the market for older, second-hand guitars has become a rather profitable one, partially due to a certain "fad" aspect, of course, but principally because the older instruments really were, for the most part, more thoughtfully constructed.

There is another way of sidestepping the current assembly line product, however, and that's through the acquisition of a custom-built instrument. Unfortunately, competent guitar craftsmen are few and far between, and their work tends to be priced well out of the range of any but the most financially well-endowed musicians. Nevertheless, more and more people are seeking out these craftsmen to provide the care and precision that factories, by and large, just can't provide.

In England, the once rare custom-built guitar is becoming more and more common on stage and in the recording studio, and the person responsible for a good 90% of those instruments is a gentleman named Tony Zemaitis.

Chances are, you've seen and heard more than one of his guitars in the hands of an impressive number of distinguished British musicians—people like Eric Clapton, George Harrison, Ronnie Wood, Ralph McTell, Ronnie Lane, Greg Lake, Spencer Davis, and Jo-Ann Kelly, to name but a few. For

# TONY ZEMAITIS

## Luthier to Harrison, Clapton, et. al.

By Dan Hedges

all the acclaim generated by his work, Tony goes about his business in a curiously low-key manner, building his instruments in a small workshop at the rear of his home in Chatham (a half-hour's drive from London) [108 Walder-slade Rd., Chatham, Kent, England] where he lives with his wife Ann and their young children. He works on his own, enlisting the talents of an engraver and an electrician only in the final stages of construction, though he gets letters every week from people interested in coming down to work with him.

Zemaitis originally started out as an apprentice cabinetmaker, working on pieces that later found their way into places like Windsor Castle and St. Paul's Cathedral. With a more-than-passing interest in the guitar, it wasn't long before he put his woodworking skills to use on an instrument of his own.

"I couldn't afford a guitar" he recalls, "so I borrowed an old Tatay (a brand of budget guitar) for reference, and thought, 'If I make it bigger, it'll be better' — and it wasn't! But it turned out quite well, anyway."

Guitar building soon developed into a money-making hobby for Zemaitis; John Baldry and Spencer Davis were among his earliest customers, though he really can't remember who was the first. In time, the "hobby" evolved into a full-time occupation, though Tony can clearly recall the days when he and Ann would dance with joy at the sale of one guitar.

Needless to say, there's no shortage of work nowadays. As of this writing, Tony is six months behind schedule, and a recent influx of orders promises to increase the backlog to nine months.

Eric Clapton's "Ivan The Terrible."



Roger Hurrell

With each guitar requiring approximately three months of work from start to finish, the average customer will have to wait the better part of a year for the finished instrument.

All told, Zemaitis builds an average of 25 to 30 guitars a year, each falling into one of three categories. First, there's the standard model, a basically straightforward instrument, unadorned and simple, that costs about 175 pounds (\$400). After that, there's a medium-quality guitar that utilizes a better grade of wood, better tuning machines, and is, in general, "fancier." Finally, there's the top-quality instrument which Tony builds for people like Clapton and Harrison—people for whom "money is no object."

Of course, the terms "standard," "medium," and "top" are only used to differentiate between the three types, for Tony puts just as much care into the construction of one of the cheaper guitars as he does into that of the most

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George Harrison with his Zemaitis



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## BILL KIRCHEN

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very selective about his string gauges, using an .011, .013, .017, .032, .042, and .054.

A final credit to the making of Bill's style goes to the Lost Planet Airmen's rhythm section, with Lance Dickerson on drums and Buffalo Bruce Barlow on bass. Bill states, "Both those guys have helped me tremendously. They've been solid since the first time I heard them. They learned how to play professionally long before they joined the band. Lance made an album with Charley Musselwhite, and Bruce traveled around with Magic Sam's Blues Band. They're the best rhythm section I could ever hope to play with. It gives me that big blues rhythm to work on top of."

As our interview came to an end, we left the Lost Planet Airmen's bus, and headed for a small club in Long Island, New York. There, a few people had to be carried out because of exhaustion during the first set, victims of dancing too strenuously. By the second set, things had calmed down to a typical LPA show. Cody was running up and down his piano with his feet, David Bromberg, Steve Berg and Roger McGuinn joined in at various points to jam, and Bill Kirchen tore the audience's heart out with his rendition of "Looking at the World Through A Windshield."

## TONY ZEMAITIS

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expensive. The wood itself comes from all over the globe: rosewoods from India and South America, spruce and Swiss pine from the Baltic region, and ebony from Mauritius.

"When I can get it, I use Honduras cedar," he explains, "but that hasn't been available since Victorian times. I find it in panels of wall units, and snap them up like mad."

To his everlasting dismay, most of the wood is still damp when it arrives, and he feels the biggest mistake committed by "homemade" guitar builders is the use of wood that hasn't been allowed to dry out properly. Then too, he feels that it's impossible for someone to turn guitar building into a money-making occupation without the proper tools — a hand saw, a circular saw, dozens of clamps, jigs, and so on.

Though Tony naturally has the final say on what form a Zemaitis guitar will take, he does bring the customer into the picture during the preliminary stages. "The average customer will come in and tell me roughly what he wants and how much he wants to spend. We'll get a piece of paper and draw out a body shape, deciding how wide he'd like the neck, how many frets, whether he wants it deep or narrow, what type of machines, inlays, and everything else.

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There isn't a lot of choice, actually, because when you're using the best materials, you only have ebony fingerboards — you don't say "Would you like rosewood?" I just won't use it.

"George [Harrison] said he wanted a 6-string and a 12-string," Tony recalls. "He's already got one of my original electrics, which I had completely forgotten about, and he's had it for a few years. Anyway, he came around and said he wanted a 6- and a 12-though he didn't quite know what. So I got some drawings out, and sent them to him. He thought about it, added some bits and pieces of his own, and sent the drawings back. George wanted to know if everything would work technically, and I told him most of it would.

"We eventually arrived at something he was satisfied with, and something I was satisfied I could do. The only trouble we ran into was with some of the inlays on the fingerboard. When the guitars were ready, George came down, collected them, was very pleased, and placed an order for some more. Right now, I'm working on a tiny, half-size guitar for him. He already has one that he uses for slide, and it works!"

There's a bit more leeway allowed with electric guitars than with acoustics, though Tony draws the line ("No, we don't make Mickey Mouse guitars!") in certain instances. "I like to look at a

guitar and think that in ten years' time, I'm still going to like it," Tony declares. "I don't want anything freaky. I don't want to be ashamed of it. On an electric, almost anything goes—as long as it's going to balance and isn't too outrageous. People do tend to forget that they're human beings, with two arms and a body, and that they've got to be able to hold it and play it.

"With acoustics, we've got something like nine different shapes, from flamenco and classical, right up to an acoustic bass—different sizes, different shapes, and we manage to fit people into that. If someone wants a particularly different body shape, I always put it to them that we've never made one with that particular shape, and I'd have to make one first and develop it — altering the jig if necessary.

"I've been asked to write books on guitar building but I honestly couldn't do it because I don't know enough about it myself," Zemaitis says. "Everything I've done, I've found out through bitter experience. It's not something you can write technical books about. You get two pieces of wood—two fronts—and they'll be of completely different quality. Some of the harder pieces of spruce will give a jazzy sound, while some of the softer pieces are often better for classical music.

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**TONY ZEMAITIS**  
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"I've got my jigs, now. I can improve on the technique, but I don't think I can improve on the actual shapes, I'm saying I can't—I'm not saying that someone else can't. I've never set myself up as an authority on guitars, just my own guitars."

Once Tony and his customer have come to some sort of agreement on how everything is going to be, the work itself begins. After the back, sides, struts, etc. are cut, but before the instrument is fully assembled, it undergoes a "Top Secret" baking process to shrink the wood, eliminating the risk of the instrument splitting and disassembling in the owner's hands, due to the terrors of central heating. After that, the bracing and struts are put on.

"I've tried all the strutting systems," Tony states, "the Gibsons, the Martins, resonator types, echo chambers, double backs, double sides, double fronts, resonators inside a standard guitar. I've tried the lot, and I've come to the conclusion that the simplest way of doing it is the best—the lightest, the strongest, the best. Having said that, 75% of the guitar is the front. It might be a cheap piece, it might be an expensive piece, but as long as it's got the right musical qualities, you've got 75% of your troubles finished."

Fully realizing the differences between "live" performances and studio recordings, Tony designs his instruments accordingly. He tailors his work to the way the musician is actually going to use the guitar. One of the trademarks of a Zemaitis acoustic, for example, is often the unusually shaped sound hole.

As Tony explains, "I found that as you get away from the small, circular sound hole, you start getting better recording on the guitar — you don't get so much of that 'woofing' sound. With D-shaped holes, and heart shaped holes, or even the scalloped holes, they record better. Like when you have a beam from an electric torch and you alter the reflector, you get the light spreading. You get a similar thing when you use different shaped sound holes with different pitches on guitars. It seems to spread the sound better — it's more even. When people insist on a round hole, they'll find that it's bigger than standard — and if they measure it across, they'll find that one axis is about a sixteenth or an eighth of an inch longer than the other — really an oval."

Once again, Tony points out that the system works for him, though it wouldn't necessarily work for somebody else. It all has to do with the way the entire instrument is constructed. As far as electric guitars are concerned (as mentioned earlier), shape isn't all that

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important, though Zemaitis prefers making them out of mahogany, which is dense, but not too dense for the purpose. "Ideally, you could use concrete," Tony quips, "but, guitarists being human, they have to be able to lift the instrument."

Both acoustics and electrics receive an average of forty coats of varnish, each sanded down to practically nothing before the next is applied. As Tony points out, "Some commercial guitars have got so much varnish on them that they're killing half the sound. We put ours on by hand—all rubbed down to nothing. The result is that you have a glow rather than a shine, and you're not stopping the sound."

Tony doesn't make his own pickups, but relies on the preference of the individual customer — generally using Gibson humbuckings or Fenders, which he himself rates very highly. "For electrics," he adds, "we use nothing but gold seal electrics, and we put dual circuits in, so that you don't get that interaction that you tend to have on a Gibson guitar. We also put extra shielding around each pickup."

The frets are placed geometrically on the ebony fingerboards, as opposed to mathematically — a system which is technically "wrong," but works extremely well. The E string on his electric bass, for example, has perfect intonation all the way down to the 24th fret, as verified on an oscilloscope [an instrument which records electronic fluctuations as visible waves] — which brings the discussion around to the subject of strings.

"Strings! That's my bugbear," Tony exclaims. "I just can't find a good set of strings—partly because they're not being treated properly, I think. Another reason, I do know for a fact, is that if they use a hard-enough metal to make a good string, it'll wear the frets out. I'm prepared for that, though, because we're using proper nickel-steel fret wire. It doesn't wear—it's designed to take proper strings. I can just imagine that if someone starts making good strings that'll wear down the standard frets, they're not going to make any friends in the trade. Apart from that, if a string breaks, that's another string to be sold."

He finds Ernie Ball strings among the most acceptable, and likes to use Martin Silk & Steels for his acoustic 12-strings, an instrument he feels he's "got sussed-out to the last." He makes his own bridges (with blocks made out of heavy alloy) and prefers fitting his instruments with Schaller tuning machines, which he finds "a bit more dependable" than anything else on the market.

Of course, it's the miscellaneous bits of inlay and engraving that make a Zemaitis guitar so pleasing to the eye.

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## TONY ZEMAITIS

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and the striking inlay work Tony puts around the soundhole is always distinctive—hundreds of tiny, multi-colored pieces of wood, assembled in varying patterns by hand.

All in all, it's a great deal of work—eighty to a hundred hours to build even the simplest instrument.

Eric Clapton's acoustic 12-string, dubbed "Ivan the Terrible" [see *GP*, Oct. '70], has thus far been the most expensive guitar Tony's built (though he won't divulge the price), and an instrument recently completed for George Harrison had \$250.00 worth of silver on it.

"I'm not trying to undercut anybody with my prices," Tony maintains. "It's just that we don't have overhead, like import taxes. It's always been a proud boast of mine that my guitars go for more or less a second-hand price. I don't want to sound big-headed, but they're definitely underpriced, and I realize they are. I'd rather make a comfortable living than a hefty killing."

Significantly enough, many of the "famous names" are repeat customers. Faces' Rod Stewart and Ronnie Wood, and ex-Face Ronnie Lane, for example, own about twenty Zemaitis guitars between them, and several musicians

periodically have guitars built to give to friends as presents.

At any rate, it's more than obvious that Tony Zemaitis really enjoys building his guitars, and wouldn't trade the many friends he's made for anything in the world. "I get my biggest kicks when a couple of classical guitarists come around with a piece written for two guitars, and they sit down and start playing my two guitars! I just sit and listen to those two guitars talking and singing—that's what really makes it worthwhile." ■

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