COVER STORY

WRITTEN BY KEVIN GALVIN
PHOTOGRAPHED BY STEVE RINGMAN

GOOD VIBRATIONS

Tacoma guitars is giving new voice to America's authentic music

The paisley-shaped sound hole and S-shaped bridge plate are two of a Tacoma guitar's distinctive features. The guitars are winning praise for their smart design and clear sound.

THE RISING FORTUNES of American roots music can be seen in the smiling faces of the blues, bluegrass and folk fans of all ages strolling across a rolling field in North Carolina at MerleFest, an annual celebration of the guitar, banjo and mandolin.

On the main stage this afternoon is the event's host, Doc Watson, a 79-year-old blind guitar player whose flat-picking talents inspire in acoustic-music lovers the sort of awe that rock reserves for figures like Jimi Hendrix and Eric Clapton.

The music is fast and witty one moment, low and passionate the next. *"Slidin' Delta runs right by my door,"* Watson sings as he renders a Mississippi John Hurt tune with his grandson, Richard. *"Slidin' Delta runs right by my door. . ."*

Special presses are used to bend mahogany sideboards into a standard cutaway shape.

Spanish cedar kerfing will be installed on the sideboards of the guitar body to add strength.

Heels of the guitar necks are milled with a computerized cutting machine, then hand-sanded before they're attached to the bodies.

And while few in the audience would recognize the brand name, the Watsons are picking their intertwining lines on guitars crafted by a young Tacoma company whose own fortunes have been strung to a growing interest in traditional acoustic music.

In just five years since it debuted, Tacoma Guitars has claimed the No. 3 spot among quality acoustic-guitar makers in the country — playing fast and hard as an independent manufacturer of distinctive instruments in a rapidly expanding market.

The company's first product was something the casual observer may not even recognize as a guitar: the Papoose, a compact instrument with an off-center sound hole and a higher voice than a standard guitar. The next, called the Chief, was a full-size instrument easily recognized as a relative of the Papoose by the paisley-shaped sound hole set in its top front shoulder.

Tacoma now produces everything from mandolins and basses to standard guitars that have drawn comparisons with such venerable names as Martin and Taylor, the market leaders. But the Papoose and the Chief best illustrate what sets Tacomas apart: bold designs, quality materials, marketing savvy.

"Tacoma is probably best thought of as a really nice, production-quality guitar that has a little bit of a different sound,'' says Art Thompson, chief reviewer at Guitar Player magazine. "They've got some smart engineers there, smart designers. They were definitely going after some new design concepts."

Players as diverse as Jackson Brown and Peter Frampton, Bonnie Raitt and the Dixie Chicks have embraced them. Guitar Player magazine noted the Papoose's "deft playability and sweet, mandolin-like voice" and highlighted another Tacoma for its "bold acoustic tones with plenty of girth and top-end shimmer."

John McKuen, founder of the Nitty Gritty Dirt Band, says, "I've had guitars shoved in front of me over the years, often. I picked this one up and I went, 'Oh! They've done it right. They play great. They sound great. And they travel great. So what else do I need?"

TACOMA GUITARS aren't revolutionary; they're part of the evolution of a distinctly American craft. The guitar's ancestors may date to pre-Enlightenment Europe, but American guitars are the ones most sought after by players and collectors.

When we talk about an acoustic guitar today, we're typically talking about a descendent of a particularly American branch of the instrument family. We're talking about the lineage engendered by the Martin family in the 19th and early 20th centuries.

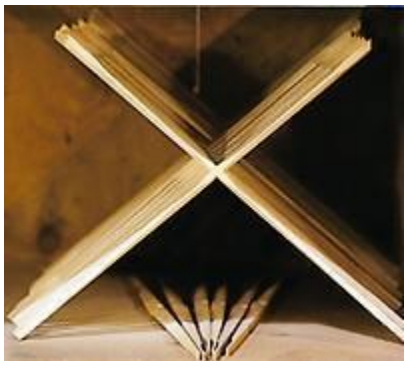
Stacks of South American mahogany will be shaped into main body parts for the guitars.

"It was really Christian Frederick Martin who, beginning with his company in 1833, began to develop all of the things that we now consider to be parts of the folk guitar, the steel string guitar," says Tom Wheeler, a University of Oregon professor and author of "American Guitars: An Illustrated History."

Frets are separated by size so they can be easily retrieved for installing on necks.

Martin defined an entire category of guitar, the steel-string flat-top, from which other makers have derived their own lines — Gibson, Guild, Taylor, Yamaha, Tacoma.

Steel-string guitars tend to look alike because the basic sound-hole shapes and sizes seem to work well with all types of woods and other design factors, Wheeler says. But Tacoma's internal bracing patterns and the designs of the Papoose and Chief series offer distinct departures. "It might not be a radical departure, in some respects," he says, "but it's something that people would take notice of. It is unconventional."



Inside the guitar's main body, support braces are attached to the tops and bottoms.

The steel strings stretching from the bridge and up the slender neck to the head of a guitar place about 180 pounds of pressure on the thin wood of the instrument's face. An acoustic guitar's sound is produced when the plucking of the strings causes the face to vibrate, and the sound waves created by those vibrations bounce around inside the guitar before escaping through the sound hole.

Traditionally, the sound hole is cut in the center of the body's face, where the pressure is maximized. Without bracing around the sound hole, the face would split and the neck would snap free. But if insufficient bracing makes an unstable guitar, extra bracing cuts down on the movement of its face and results in a less sonorous instrument.

By moving the sound hole away from the center, Tacomas gained stability while reducing the braces inside, allowing the top to vibrate more freely. Choosing a paisley-shaped hole that followed the curve of the top front produced an eye-catching design that set the brand apart.

The knowledge gained by developing the Papoose and the Chief helped lighten the bracings on the standard guitars that Tacoma also produces. And the instruments have been winning converts for their playing action and their bright, clear sound.

Yunpok Yi examines the neck of an instrument before he goes back to sanding and adjusting it to make sure it's in perfect alignment with the bridge of the guitar.

The Tacoma Guitars label, including the model and serial numbers, is set inside the guitar body during manufacturing. Tony Martinez glues the label in place before the top and bottom of the guitar are put on.

TERRY ATKINS, Tacoma Guitars' chief designer, walks through the company's factory, casting a professional eye over the operation, part foreman, part maestro.

The lighting is dim, with only a hint of wood dust in the air. The clicking, banging and snapping that arise from the workstations creates something more than a buzz but less than an industrial din as he passes stacked sheets of spruce that will become resonant guitar tops and blocks of mahogany that will be transformed into gleaming, slender necks.

Atkins has been making or repairing guitars for more than 20 years, starting in his garage in Chattanooga, Tenn. Guitar makers behave more like microbrewers conspiring to build a better beer than software makers safeguarding secret codes, and Atkins is no different. Many tricks of the trade he picked up over his career have been implemented and augmented at Tacoma, where he arrived as product development manager in 1996.

Workers at one table book-match the grain on thin sheets of mahogany to maintain consistency in the reflective qualities of the wood. Then, with glue squirted from squeeze bottles, they attach two shaped pieces to form guitar backs. Similar pieces of mahogany and rosewood are fitted into S-shaped metal forms and steam-heated to create the guitar's elegant curves as vapor escapes from pinholes in the metal.

Atkins halts his presentation of the guitar-making process, his gaze fixed on a worker who is laying out an intricate pattern of rosewood bracing. Trouble is, the worker should be using maple for that particular model. Atkins speaks briefly with him and his foreman and learns that the maple bracings are out of stock. "It's a good substitution," he says. "But I should know about it before they do it."

The handwork in the factory is combined with the labors of several computer-driven cutting tools that require Tacoma to employ two machinists and a programmer.

One machine with 22 automatically switching tool heads is using a cup-cutter to craft eight guitar necks simultaneously. In a separate room, an automated laser cuts the bridge plates that guide the strings; the plates will be cut into an easily recognizable S-shape that helps distinguish Tacoma guitars from other brands. The laser also burns the Tacoma name into the headstock and cuts nitro-cellulose material into translucent pickguards that protect the polished wood tops of the instruments.

"The bridge plate used to require five different cuts, different jigs," Atkins says. "Now we just throw this piece of wood in there and it cuts it in about five seconds."

When the steam-heated sides emerge from the metal forms, flexible strips of wood and more glue are used to attach them to the backs and the guitar faces of spruce and rosewood, which have been fitted with carefully crafted wooden braces. A new instrument is taking shape.

THE ACOUSTIC guitar has inherent attractions for the folk hero and the would-be troubadour alike: affordability, portability and tradition. The instruments are both individual and social. After learning a few basic chords, a single player alone in his room has an extended repertoire in hand; folks can gather to listen or join in.

Simon Nielson files down the raised frets until each one is aligned perfectly with the rest. A wood cover is put over the top of the guitar so it isn't damaged during the filing.

But the acoustic-guitar industry was in steep decline in the 1980s. The blues-based rock and roll of the Rolling Stones and Led Zeppelin had given way to glam rock and pop schlock in the 1970s and, throughout the '80s, the angrier sounds of punk and heavy metal. The most venerable names in the acoustic-guitar business were on the verge of bankruptcy.

That began to turn around with a single performance: Eric Clapton's 1992 appearance on MTV's "Unplugged."

That "took a market that was darn near on death's door and turned it into something that was unbelievably vibrant," says George Gruhn, a Nashville guitar-shop owner and widely recognized expert. By last year, sales of acoustic guitars in the U.S. nearly matched those of electrics — doing better, even, than they had in the 1960s heyday of folk.

Last year, 812,975 acoustic guitars were sold in the United States — the vast majority of them cheap, mass-produced units imported from overseas. Tacoma turned out more than 12,000 instruments, an impressive number for a new player in the market.


Chief designer Terry Atkins discusses the features of a Tacoma with a representative from a California amp company.

Although the company is here in the far northwest reaches of the country, its success has been due in no small part to the increasing interest in the acoustic music of the East and South — Appalachia, the Mississippi Delta and the Blue Ridge Mountains.

The movie "Songcatcher" dramatized the beginnings of bluegrass and blues; the PBS documentary "American Roots" offered a four-part look at the music's history. The soundtrack for the movie "O Brother Where Art Thou?" sold more than 4 million copies and garnered the Grammy Award for album of the year.

"Somehow, every time the music business gets slicker and slicker, there's a great, growing hunger to get back to where it started," says John Cohen, a founding member of the New Lost City Ramblers and a key player in the 1960s folk revival. "People somehow never lose sight of that original message — that it's an individual voice and an individual need."

The Seattle-based magazine No Depression has helped define a new trend in "alt country," and bands like Pinmonkey and Wilco, whose members might have gone indie rock a decade ago, instead rooted their sound in a deeper musical tradition.

Jeff Place started noticing a shift in the mid-'90s, through the summer interns in his office at Folkways Records. "These kids show up with, you know, body piercings and mandolins. It was sort of a different thing. It was cool. You were seeing change. The alternative-music world started bringing back acoustic instruments and getting away from the grunge and distortion sound."

In roots music, there is authenticity. You can hear the wind and the weather rushing through lives far removed from ours, lives that somehow seem closer to what we remember as "the human experience."

"It's the joys and sorrows, and all the in-betweens, of people set to music, and a lot of the more popular music doesn't do that," Doc Watson says. He believes that folk or traditional or roots music — whatever people want to call it — resonates from one generation to the next because the songs tell stories about real people and their feelings — "not necessarily just their stories."

Tacoma Guitars CEO and founder J.C. Kim, right, listens while a new instrument is tested in the music room at the factory.

Watson hosts MerleFest in honor of his son, Merle, who was his picking partner until he died in a tractor accident in 1985, and its growth is a barometer of interest in old-time music. A few thousand fans showed up the first year to see Doc and friends play on a pair of flatbed trucks outside Wilkesboro Community College. This past April, more than 80,000 attended.

AT ROUGHLY the same time the acoustic-guitar market began to revive in the early 1990s, the fates conspired to place a guitar factory in a Tacoma industrial park.

In 1991, Young Chang Piano Akki Ltd. established the Sound Mill in Tacoma to process hardwoods harvested in the great Northwest into soundboards for its pianos. Mill general manager J.C. Kim persuaded his corporate bosses to build a complementary guitar-manufacturing plant nearby.

In the early years, the factory turned out fewer than 100 guitars a month for another brand name, but Kim and his associates wanted to create their own line of instruments. They turned to their industry contacts for ideas.

In a Bremerton guitar store, Richard Gilewitz spreads his meal over the top of his 12-string

Tacoma guitar. Gilewitz was getting ready to give a performance and clinic on Tacoma guitars for locals.

The concept for the Papoose came from Gruhn, the guitar-market expert who saw a need for a small travel guitar and one that offered a higher voice in the recording studio. The Papoose is tuned to A, five steps above a standard guitar.

The Papoose and the Chief, along with three more traditional models, debuted at the 1997 winter Convention of the National Association of Musical Manufacturers. Gruhn helped place the Papoose in the hands of such bluegrass luminaries as Ricky Skaggs and Vince Gill. Within months of the show, orders from Tacoma's 75 original dealers far outpaced the manufacturer's capacity.

Young Chang was forced to sell the mill and guitar factory when the "Asian flu" struck in the late '90s, infecting economies from Japan to Thailand. J.C. Kim bought the plants and the Tacoma brand name in December 1999.

Just three years later, Tacoma is crafting about 45 instruments a day. Most of the company's products are priced below $1,000, where marketing research suggests the largest number of guitar buyers are found.

The national Guitar Center chain began offering Tacomas last year, and this year it began shipping the company's second-tier line, marketed under the Olympia brand name and targeted at customers willing to pay only a few hundred dollars for a guitar. The first shipment of Olympias sold out before a planned radio spot ever aired.

Kim incurred a heavy debt when he purchased the factory and all the equipment, but after recapitalizing last year the company is keeping its accounts with black ink.

THERE IS NO such thing as a perfect guitar. There are, however, perfect matches between instruments and players.

"Remember that this is a tool with which we're going to make music," Wheeler observes. "It is not just the remote control for a television. It is a tool with which we are going to express ourselves."

Experts resist direct comparisons between Tacomas and other fine guitars. Different materials and different prices make for different pairings of instruments and consumers. But John McKuen says his Tacoma compares favorably to his vintage 1932 Martin.

McKuen recently took his Tacoma parlor guitar on a 22-city tour. "They just have a nice up-front sound," he says. "The sound doesn't sound like it's buried inside the guitar, and that happens often."

The instruments sport wide fret boards and they play evenly up and down the neck. "When you strum a big chord you hear every note evenly," McKuen says.

The first set of MerleFest this year marked the debut of the Tacoma cutaway that the company presented to Doc Watson. "I like the action. It has a beautiful neck on it," Watson says. "A bunch of good things . . . come with a good guitar, and that one has most of them."

But by that evening, when he flat-picked through a rendition of "Will the Circle Be Unbroken?" Doc had returned the Tacoma to its case in favor of the Tennessee-born, custom-built cutaway he's played for decades.

His grandson Richard, however, continues to play his Tacoma almost exclusively. And over the next few years, Tacoma will be reaching out to the next generation of acoustic guitar players.

They may start appealing to players with different tastes, too. Kim's office is filled with prototypes for new instruments, including everything from variations of existing guitar, bass and mandolin designs to plans for electric instruments — even an electric Papoose.

"We started out with the Papoose and did well,'' says Atkins, "so we're not shy.''